Australian Consumers' Association

May 1993

# CHOICE

## YOUR HEATING OPTIONS

Toasting your toes without burning money

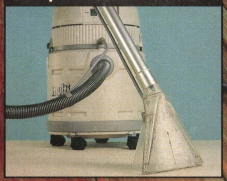
## ASTHMA CARE

Replace luck with good management

Perfume

Frost-free fridges

Shampoo vacuum cleaners



# CHOICE

**The magazine of the Australian Consumers' Association ACN 000 281 925**
Council Member of the International Organization of Consumers' Unions
CHOICE is a registered trademark of the Australian Consumers' Association

**Registered Office:** 57 Carrington Road, Marrickville NSW 2204 **Telephone:** (02) 558 0099
**Subscription enquiries:** (02) 558 8088 **Fax:** (02) 558 9341

**PUBLICATIONS**
**Managing Editor:** Catherine Gray **Deputy Manager:** Jane Mackenzie
**CHOICE:** Jane Mackenzie (Editor) **Consuming Interest:** Alison Kahler (Editorial co-ordinator)
**Books:** Keren Lavelle (Commissioning Editor) **Journalists:** Peter Cerexhe, Christopher Connolly, Tom Crawley, Colleen Ford, Alison Haynes, Natalie Hoy, Jackie Lacey
**Production:** Louise Williams (Manager), Chris Roberts (Designer), Joe Sydney
**Verification:** Elizabeth Montague (Manager), Ron Bitmead, Pam Gardiner, Ruth MacKay
**Marketing:** Rob Asser

**FINANCE & ADMINISTRATION**
**Manager:** Alan Johnston
**Accounts:** Jeanette Dwyer, Wolf Sommer, Scott Carruthers
**Administration:** Robyn Miller (Co-ordinator), Peter Griffin, Joanne Kladis, Christine Shaday, Joyce Slattery, Roslyn Sydney **Reception:** Sandra James
**Subscriptions:** Thelma Bracken (Senior Supervisor), Jean Gordon, Simmone Hamilton, Rosemary Martin, Jeanette Porter, Kerry Preston, Chantal Pucella
**Data Processing:** Tim Fleming (Manager), Tony Harrison, Kathy Theochari

**POLICY & PUBLIC AFFAIRS**
**Manager:** Louise Sylvan **Deputy Manager:** Phil Marchionni
**Executive Assistant:** Maryann Scott **Media Liaison:** Geoff Sirmai, Fiona Wyllie
**Information:** Jenni Noble (Co-ordinator), Jacqueline Isles, Sandra Leach, Chris Ruggles
**Project Officers:** Robert Drake, Carole Renouf, Lioba Rist
**Resource Centre:** Hazel Bowley (Manager), Maria Athanasatos, Ken Lovett, Christine Power

**TESTS & RESEARCH**
**Manager:** Norm Crothers **Deputy Manager:** Neill Patterson
**Administration & Marketing Co-ordinator:** Lisa Walton
**Tests & Technical Research:** Neill Patterson, Des Shales, Bernadette Walsh (Project Managers), Jane Bowden, Brian Champion, Annette Coburn, Stephen Fisher, David Hilliger, Marissa Nerwich, Louise Newey, Raja Rajagopal, Beverly Reichman, Helen Ross, Max Wijasuriya, Clive Holmes (Program Manager)
**Survey Research:** Christine Franks (Manager), Theresa Thomas (Senior Researcher), Kate Murdoch, Mary Heffernan, Larraine Hall, Russ Hausfeld and Peg Hayman (Consultants), Elizabeth Craig, Michelle Sprod, Chris Ho, Dorothy Kneale, Jan Rigby
Market statistics provided by GFK Marketing Services Pty Ltd.



CHOICE is published by the Australian Consumers' Association (ACA), an independent, non-profit, non-party-political organisation. The Consumers' Association is funded primarily through subscriptions to its magazines and also from some fee-for-service testing. We aim to provide consumers with information and guidance about goods and services. In addition we seek to represent and lobby on behalf of consumers to balance the influence of manufacturers and service providers.

All products tested for CHOICE are bought randomly in the marketplace and no samples are accepted. Evaluations are based on tests, trials and expert judgments as appropriate. These findings should not be applied to models other than those nominated in CHOICE. We do not necessarily evaluate every available product or service in a particular class. We check the results of our tests just before publication with manufacturers, but specifications and quality may vary. If this issue is no longer current check with us or the manufacturer to determine if important changes have taken place before you buy. If, despite our extensive checking, a mistake slips through we will publish a correction as soon as possible.

Ratings and conclusions are solely for readers of CHOICE. No information in CHOICE may be used in advertising or for any promotional purposes and the Consumers' Association will take all possible steps to prevent such use of its material, its name or the name CHOICE.

The ACA is governed by an honorary council elected by the voting members. (For information about voting membership please contact our Information Service on (02) 558 0099.) Members of ACA's Council give their time without reimbursement. They are not engaged as principals in industry, advertising or sales.

**COUNCIL**
**Chair:** Wayne Haylen, B.A., LL.B., Q.C. **Deputy Chair:** Ian Lowe, B.Sc., D.Phil.
**Members:** Allan Barton, Ph.D; Professor G. Bennett, B.A., Ph.D., A.S.T.C.; Paul Bingham, B.A.(Hons), LL.M.; John Braithwaite; Simon Chapman, Ph.D.; Graham de Vahl Davis, A.M., B.E., Ph.D.; Richard Gartrell; John Hirshman, M.B.B.S.(Hons), D.P.H., D.T.M.&H., F.R.A.C.M.A.; Bruce Kercher, B.A., LL.M.; David Marcus, B.A.(Hons); Liza Newby, LL.B.; Steven Pyott, M.Sc., C.Text.A.T.I., Grad.Cert.Ed., Adv.Dep.Ed.; Itzhak Rez, LL.B., M.B.A.; Suzanne Russell, M.B.A., B.Ed.(Home Economics); Liesel Scholem, B.A.(Hons), Dip.Ed., M.A.Ps.S.; Associate Professor E.L. Wheelwright, D.F.C., M.A.; Graeme Wiffen, B.A., LL.M.

**GENERAL MANAGEMENT**
The Association is managed on a day-to-day basis by a committee comprising the four department managers and a staff-elected representative.


## *Editorial*

THERE'S always been a healthy spirit of co-operation within the international consumer movement. Australia was one of the founding members of the International Organization of Consumers Unions (IOCU) way back in 1960, and IOCU remains a valuable forum for sharing ideas and information.

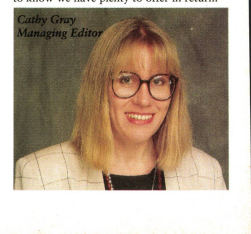
The organisation has just held a major conference in the Netherlands, on the problems of achieving sustainable consumption and how they might be addressed by consumer groups. This is an area where the Australian Consumers' Association has been doing some very intesting work, particularly on 'life cycle analysis' — the process of assessing the environmental impact of products from 'cradle to grave'. We've been breaking new ground in fact, and our Tests and Research Manager, Norm Crothers, was able to present the results of this research to the technical session of the IOCU conference. It's exciting to see Australia making an active contribution on such an important issue.

We're offering our expertise beyond our borders in other ways too. Our laboratory is one of the few non-industry facilities in the world set up to test air conditioners, and both the Hong Kong Consumer Council and the Belgian consumer magazine, *Test-Achats*, have taken advantage of this over the past few years. Closer to home, our ties with New Zealand have been growing steadily stronger — in fact, around 40% of the product tests reported in CHOICE during 1992 were conducted jointly with the NZ Consumers' Institute. This is efficient for both organisations, allowing us to share test expenses and in many cases to include more brands and models than we would otherwise be able to do.

In addition, of course, we have access to articles published by IOCU members around the world. This month's report on perfumes is a good example, coming originally from a co-operative effort between Belgium's *Test-Achats* and Switzerland's *J'achète Mieux*, with the English translation first published by *Canadian Consumer*. Talk about multi-national!

Compared to organisations like the USA's Consumers' Union (whose *Consumer Reports* magazine has around five million subscribers) and the UK Consumers' Association (with around a million subscribers to *Which?* magazine), Australia manages to do an amazing amount with relatively limited resources. Although there's always a lot we can learn from our 'big' brothers and sisters, it's good to know we have plenty to offer in return.

*Cathy Gray*
*Managing Editor*



VOLUME 34 MAY 1993 NUMBER 5

Cover photo: Kent Mears

## Features


**6 Your heating options**
The types of fuel to choose from, different kinds of appliances, and working out how much heat you need — it's all in this article.

**22 The CHOICE Enviro-challenge**
Many people are trying to choose products and modify their behaviour so their lifestyle will have less impact on the environment, but environmental problems are complex and much of the information reaching consumers is simplistic or incomplete. Try our quiz to see if you're making the right decisions.

**26 Elementary asthma management**
Although more people are being diagnosed as asthmatics these days, the number of people dying from the disease has started to decrease. Experts put this down to better management: prevention of an attack rather than short-term treatment.

## Tests


**12 Perfumes**
To help you choose a Mother's Day present! An expert 'nose' assessed 94 internationally available perfumes, then a user panel gave them the thumbs up or down.

**37 350 L to 400 L frost-free fridges**
The fridges in our 30th fridge or freezer test were quite a good bunch — and we have news of developments in CFC-free models.

**42 Shampoo vacuum cleaners**
They vacuum, mop up spills and shampoo carpets — very handy machines if they worked well. Unfortunately the results were disappointing.


## Departments


**4 Choice Cuts**
Water filter scam; furniture labelling scheme; pool pressure valve alert; life insurance agents; are you missing cents.

**11 Shopping around**
The cost of some computer software packages around the world.

**18 Consumer Bookshelf**

**30 Consumer-in-law**
How do Consumer Affairs departments decide whether to ban a product? What are the barriers and restraints?

**34 From our lab: Tiny tellies**
Handheld colour TVs are starting to come down in price — we checked out one that costs around $250.

**46 Letters**
Pool fencing; recall noted; arthritis and diet; organ donation.

**47 What do you know?**
Test yourself with our regular consumer quiz.

### Next issue

Long-life light bulbs, exterior paint, electric wall ovens, slimming programs, glues, hiring tradespeople, what it costs to get a product into a supermarket, grains and cereals.

### July, August, September

**Tests:** Car batteries, water heaters, supermarket survey, fresh pasta, hybrid bikes, mains drills, are low-tar cigarettes really low-tar?, washing machines, high chairs.

**Features:** Investing in property, mattresses, is the insurance dispute review system working?, getting appliances serviced satisfactorily, antibiotics, life insurance, warranties, vitamins and minerals, alternative energies, junk insurance, security-screen doors.

*Water trickery*

## MORE FILTER FIBS

THE latest trick we've come across in the marketing of water filters is door-to-door salespeople posing as government water inspectors and trying to trick people into buying expensive filters.

NSW Consumer Affairs Minister Kerry Chikarovski told the NSW Parliament of a case where a bogus water inspector knocked on a Sydney couple's door flashing an official-looking photo identification card and saying he needed to carry out an analysis of their water. "This 'test' involved dropping a tablet into a glass of water," Ms Chikarovski said. "The tablet coloured the water as it dissolved and the salesman claimed it showed the water was contaminated and unsafe to drink." He then tried to sell them a water filter costing several hundred dollars.

If you're ever approached by people claiming to be government officials who also want to sell you something, contact the government body involved and your local consumer affairs department.

*Swimming pool news*

## POOL PRESSURE VALVE ALERT

THE Commercial Tribunal of NSW has alerted the Building Services Corporation and the swimming pool renovation industry to a design fault in concrete pools which have single hydrostatic pressure relief valves.

Hydrostatic pressure relief valves are supposed to allow water to enter an emptied concrete pool in circumstances where water pressure outside the pool exceeds air pressure inside the pool. The details of a recent appeal before the tribunal revealed that if an older concrete pool, which has a plug instead of a spring-loaded valve, is emptied for repairs, the plug may not prevent external hydrostatic pressure from causing the pool to lift out of the ground.

In two separate appeals in 1992, the Tribunal found that contractor Christian Jandey of Jandey Pool Renovation Pty Ltd had acted in a good and workmanlike manner, in spite of the fact that the pool he was repairing essentially popped out of the ground. Instead, the tribunal was critical of the lack of a code of practice or Australian Standard dealing with the question of pool renovations and their emptying.

"The Tribunal confesses to some surprise that the inadequacy of a single hydrostatic pressure relief valve has come to be recognised so recently by professional engineers ... [and] it is tempting to query why ... a risk of 'floating' has not produced a design requirement that swimming pools be constructed with more than one hydrostatic pressure relief valve," reported acting chairman Professor SW Cavanagh.

If you have an older concrete swimming pool in need of repair, bring this problem to the attention of your contractor. An engineer appearing before the Tribunal suggested they may have to drill a hole in the base of the pool at the opposite end to the hydrostatic pressure valve or plug, large enough to enable hydrostatic pressures to balance when emptying the pool or to cater for changing groundwater conditions.

*Furniture labelling*

## LOOK FOR THE TAG

IF you're buying furniture you should start looking out for a blue swing tag (pictured right). It contains information on the piece's safety, strength, stability, durability, ignitability, workmanship and finish.

The scheme is still quite new but as it becomes more widespread it should help consumers compare pieces of furniture in the shop. Without the label you can decide whether you like the look of it or find it comfortable, but you can't tell just by looking whether one chair will last longer than another or if one table is more likely to stain from a hot coffee cup than another.

There are six levels the piece can be categorised as, from delicate such as antiques (level 1) to severe industrial (level 6). Domestic furniture should reach at least level 3 and preferably level 4.

Similar schemes are operating in other countries, where manufacturers submit their furniture to an independent testing authority which puts them through a series of standard tests. One that might be familiar to Australian consumers is the Swedish Möbelfakta label often seen on Ikea furniture.

The Australian labelling scheme is run along similar lines by the Australian Furniture Research and Development Institute (AFRDI), a body established by the Commonwealth Government and the furniture industry in 1990 and based in Launceston, Tasmania. Most of its work so far has been research on timber products and commercial furniture, but the development of a labelling scheme is one of the reasons the institute was set up in the first place.

The Consumers' Association believes this scheme deserves the support of both consumers and the furniture industry and we will keep you up to date on its progress.

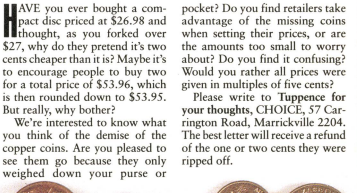
*Tuppence for your thoughts*

## NO CENTS

HAVE you ever bought a compact disc priced at $26.98 and thought, as you forked over $27, why do they pretend it's two cents cheaper than it is? Maybe it's to encourage people to buy two for a total price of $53.96, which is then rounded down to $53.95. But really, why bother?

We're interested to know what you think of the demise of the copper coins. Are you pleased to see them go because they only weighed down your purse or pocket? Do you find retailers take advantage of the missing coins when setting their prices, or are the amounts too small to worry about? Do you find it confusing? Would you rather all prices were given in multiples of five cents?

Please write to **Tuppence for your thoughts**, CHOICE, 57 Carrington Road, Marrickville 2204. The best letter will receive a refund of the one or two cents they were ripped off.



## "WE'RE NICE GUYS ... REALLY!"

*"Too often people are given the impression that* [life insurance] *agents collectively have a low public reputation, and deserve to be poorly regarded. This distortion of public perception has reached the stage where myths are in danger of being accepted as facts. Where reality is being overshadowed by hostility."*

So spoke Ian Salmon, chairman of the Life Insurance Federation of Australia (LIFA) during an address to members of the Senate Select Committee on Superannuation, the Trade Practices Commission Inquiry and other interest groups at Parliament House last year.

In the speech, which was reprinted in insurance industry magazine *The Lifeuriter* last December, Salmon quoted from a survey of over 2000 respondents which showed that most people found life agents honest and felt they had helped them to make wise choices.

Convincing stuff! That is until you turn to the second page of the speech and read the advertisement pictured right for a video which promises to teach agents how to make money out of other people's fears. We ask you, Mr Salmon, would honest, professional agents really be interested in such unsavoury sales tactics?

Salmon goes on to argue against the proposition that agents should have to disclose to clients how much commission they earn. "Generally, disclosure of commissions will mislead consumers," he says. But if agents can recoup the $495 cost of their Gionjay video from just one sale, perhaps it's time consumers knew exactly how much life insurance agents were earning.


**DRAMATICALLY INCREASE YOUR SALES USING AN 8 MINUTE VIDEO**

Imagine sitting with your prospects (partners in business) in front of a video as it portrays the emotional story of what happens to a partnership and to both families when one of the partners dies. Or imagine sitting with a couple in their lounge room watching a widow's outburst because her late husband didn't have Life insurance.

Imagine the power this would give to your presentation. Well, imagine no longer! There is such a video and it's already helping agents to dramatically increase their sales. And prospecting is made easy when you simply invite potential clients to see a short video.

Your investment is just $495.00 and you will recoup that from your first sale.

We are so confident in the video that we are offering a 30 day full money back guarantee

Send payment and mailing details to:

**GIONJAY FINANCIAL SERVICES**

5 Rockbrook Road, East St Kilda, Vic 3183

Enquiries Joel Friedman (03) 822 7831


## L&G JUMPS THE GUN

LIFE insurance company Legal and General seems to be jumping the gun with plans to 'license' its agents in light of the Trade Practices Commission's recent scathing report on the life insurance industry.

The Trade Practices Commission report concluded that, on top of improved information disclosure, some form of licensing, certification or registration of life agents was needed to raise their standards of conduct and competency (some areas of which were found to be deficient).

The Life Insurance Federation of Australia (LIFA) has indicated it is keen to develop a licensing system, but before such a scheme can be implemented it would need to be submitted to the Trade Practices Commission for assessment under the authorisation procedure of the Trade Practices Act. LIFA has indicated it is keen for this to happen too, along with broad consultation with interest groups including the Consumers' Association.

Meanwhile, Legal and General has decided not to wait for the outcome of that consultation and assessment process. All existing agents working exclusively for L&G will receive an interim silver licence until they fulfil the insurer's academic and training requirements, when they will be granted a full gold licence.

The initiative at least shows the company wants to take responsibility and set high standards for its agents. However, it is somewhat premature and may only serve to confuse consumers. It is essential that the requirements made of agents under any licensing or certification scheme are uniform throughout the industry and well understood by the general public. In fact, consumers who come across insurance agents claiming to hold some form of licence should be wary of such claims. We will keep readers up to date with developments in life agent regulation.

*Correction*

## COMPUTER PRINTERS

**(CHOICE, March 1993)**

FOR the **HEWLETT PACKARD DJ 500** inkjet computer printer we quoted a price range we had found in nationwide checks of $550 to $639. The $550 figure has subsequently been found to be incorrect. This model is available from some dealers for around $650 (including sales tax), but outside capital cities the price is likely to be closer to $700.

*Update*

## MORE BAD NEWS

IN April *Choice Cuts* we told you how to minimise bank Debits Tax by, for example, keeping an account without a cheque book; and we told you NSW and South Australia had doubled the tax payable with effect from January 1, 1993. Now, from May 1, 1993, Victoria has doubled the tax too.

Bank account Debits Tax is a tax on debits of $1 or more from a bank account with a cheque facility. In NSW, SA and now Victoria, the tax is on a sliding scale from 30 cents on each transaction under $100 to $4 on those over $10 000. So, for example, if you draw out $100 (even at an ATM), you'll have to pay 70 cents in tax.

As we pointed out in April, with these higher rates of tax even a modest account user could quite easily end up paying over $100 in tax (spread over the year), so it's worth looking at how you use your account to minimise the number of debits.

*Can you help?*

## PRIVATE HEALTH INSURANCE

AS membership numbers of Australian private health insurance funds are down, many companies are re-evaluating their operations with the intention of making their services more consumer-friendly. The Consumers' Association is engaged in a dialogue with some of the health insurance companies, and you can help in this process by telling us your experiences as a member of a private health fund.

We would like to hear about your interactions, good and bad. We're not conducting a survey, but rather we want to add to stories which have already been sent to us by subscribers, concerned community organisations and health care providers. Aspects which interest us include:

- Why did you choose the policy you did?
- Was it clearly explained to you (verbally or in the brochure) what was covered?
- Have you had any experiences with making claims, and were you covered for what you thought you were?

Write to: **Private health insurance**, CHOICE, 57 Carrington Road, Marrickville 2204.

Thank you for your help.

# YOUR HEATING OPTIONS

*Avoiding winter brrrrrr ...*

IF YOU'RE beginning to feel the winter chill, your thoughts may well be turning toward additional heating. This report is for people who want to adapt or improve on their existing heating options without major remodelling of their home.

On this page we look at a way to work out the heat capacity you need for your home, and opposite we tell you how to make the best use of the heat generated. Overleaf we look at the different fuels available, and the different appliances. On page 10 we give advice about the type of heater to use.

### How much heating do you need?

To keep a room at a comfortable temperature when it's cold outside requires the addition of heat to a room. This is because heat is lost through the walls, ceiling and windows.

There are many different methods of calculating the amount of heat you need to add to a room to balance the losses. These vary in complexity and in the assumptions they make about the thermal qualities of the building materials used, external and internal temperatures and so on. The calculator below is a simple example.

The calculator will give you an estimate of the heating you'll need; it's likely to be somewhere between 80 and 130 watts per square metre of floor area. To put this heating requirement into perspective, a single-bar electric heater is likely to be rated around 1000 W (1 kilowatt); to heat a small bedroom (around 3 m x 4 m) you'll probably need a heater with a capacity of between 960 W and 1.5 kW, for a living room (5 m x 7 m, say) you're likely to require a heating capacity between 2.8 kW and 4.6 kW, and for a large living/dining area (7 m x 12 m, say) between 6.7 kW and 10.9 kW.

### Watt's a joule?

Energy is measured in joules; a million joules is one megajoule or MJ. Gas heaters are rated in megajoules: a heater rated 14 MJ, for example, will use 14 MJ of energy per hour.

Electric heaters are rated in watts; this is a measure of the *rate* of energy use — with one watt equal to one joule per second. So a kilowatt hour (the amount of energy used by a one kilowatt appliance in one hour) is equal to 3.6 million joules (60 x 60 x 1000) — 3.6 MJ. This means a 2.4 kW electric heater (the maximum capacity for a heater you plug into the mains) can produce 8.6 MJ per hour.

The heat produced from other fuels can be measured in MJ too; for example, wood will typically produce 16.2 MJ per kilogram when it's burnt.

## CALCULATOR: HEAT LOSS FROM A ROOM

You can use this calculator to estimate your requirements for room heating. Fill in the area of each element of the room (in square metres) and then multiply the area by the applicable figure for heat loss, as shown. This will give an estimate of the heat loss in watts through that element of the room. Adding up the heat losses for each element will give a figure for losses from the whole room, and if you're to maintain a comfortable temperature in the room this is the amount of heat you'll need to put in. However, to allow for heating the room up to start with and for other factors, add an extra 50% heating capacity, as shown.

The kilowatt figure you get is the amount of electrical heating you'll need. Multiply the kW figure by 3.6 to give you a figure for megajoules per hour — used to express the heating capacity of other types of heater, such as gas.

| Room element | Area | Heat loss/$m^2$ |
|---|---|---|
| **Ceiling** (to insulated roof or unheated room) | _____$m^2$ | x 20 = _____ |
| **Ceiling** (to uninsulated roof) | _____$m^2$ | x 40 = _____ |
| **External walls** (foil insulation) | _____$m^2$ | x 10 = _____ |
| **External walls** (uninsulated) | _____$m^2$ | x 26 = _____ |
| **Internal walls*** to heated room | _____$m^2$ | x 0 = no losses |
| **Internal walls*** to unheated rooms | _____$m^2$ | x 16 = _____ |
| **Windows** with double glazing or full-length curtains | _____$m^2$ | x 40 = _____ |
| **Other windows** | _____$m^2$ | x 80 = _____ |
| **Floor** (slab on ground or enclosed floor space) | _____$m^2$ | x 10 = _____ |
| **Floor** (above open space or unheated room) | _____$m^2$ | x 20 = _____ |
| TOTAL WATTS OF HEAT LOST = | | _____ |
| ADD 50% = | | _____ |
| **DIVIDE BY 1000 TO GET KILOWATTS (kW) =** | | _____ |

* And walls to neighbouring dwellings.
Adapted from CSIRO's publication *Room heaters and coolers – choosing the best size.*

### *Making the most of the heat you've got*

Averaged around the country about 50% of the energy we bring into our homes comes from electricity, 30% from gas, 10% from solid fuel and the rest from other sources such as solar energy and kerosene. Of this energy we use approximately (depending on where we live) 43% on heating, 8% for cooking, 9% for refrigeration, 26% for water heating and the rest for lighting, cooling, washing, TV and so on. Of course these proportions vary and in the colder parts of Australia like Victoria room heating in winter can account for around 50% of average household energy use, while in warmer areas it's closer to 15%.

The best method of heating for you will depend on the size of the room, how you use the room and the cost and availability of different fuels. Choosing the best type of heating for your needs and taking steps to reduce the amount of heat you lose can cut your energy bills significantly.

Over the page we outline the choice of appliances with their particular advantages and disadvantages; on this page we tell you the things you can do to make sure you use your heating effectively.

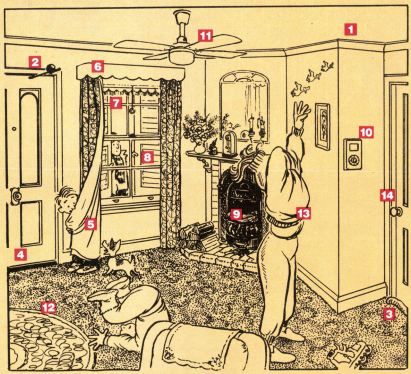
## INSULATION

THERMAL insulation reduces heat losses; it doesn't make a room warm in winter or cool in summer. What it does do is help to reduce the flow of heat into and out of a room due to the difference between outside and inside temperatures. If there's a big difference between internal and external temperatures there will be a correspondingly big heat transfer — so you could be paying to heat the outside world in winter, and losing your cool in summer. Insulation creates a barrier that reduces the movement of heat.

The greatest improvement in comfort and saving (cost and energy) is normally achieved by insulating the ceiling. The walls come next and then the floor — but insulation can be difficult or expensive to add to these. The effectiveness of insulation is described by an R-value: the higher the R-value, the better its insulating qualities. Even uninsulated buildings have some resistance to heat loss — for instance, an unlined roof might have a winter R-value of 0.3. Standards Australia recommends minimum R-values for roof/ceiling insulation around the country based on the temperatures in those areas, the cost of insulation and likely savings. In Tasmania they recommend R3.5, while in Brisbane it's set at R2.0.

The CHOICE report *Home Insulation* in July 1989 discussed the various different types of insulation available and listed uses and limitations of different materials. In the April 1993 issue we looked at some of the pros and cons of fibreglass and cellulose insulation.

### *Keeping the heat where you want it and still saving energy*




**1.** The ceiling is the first priority when adding insulation. See *Insulation* for more details.

**2.** Install an automatic door closer. Much heat can be lost if doors are left open.

**3.** Fill cracks and block holes — these cause draughts.

**4.** Install draught excluders.

**5.** Line curtains with insulating material.

**6.** Add a box pelmet. This stops warm air coming into contact with cold windows.

**7.** Even in winter the sun provides heat. Keep curtains or blinds open on north-facing windows, closing them at night or when it's overcast.

**8.** Install airtight screens, shutters or double glazing.

**9.** Close off any unused fireplace, or install a damper which can be closed when the fireplace isn't in use.

**10.** Keep an eye on the temperature you're heating the room to — use a thermostat or thermometer. Try adjusting the heating to to a lower setting than you normally use.

**11.** Use a ceiling fan at low speed to circulate the hot air which collects at ceiling level.

**12.** A carpet or rug will reduce heat loss through the floor.

**13.** Heating people is more efficient than heating spaces. Put on a warm jumper and socks. Your feet are very sensitive to cold and if you've got cold feet your whole body can feel cold; remember, because warm air rises, floor level is often the coolest part of a room.

**14.** Only heat the rooms you use.

## SOLID FUEL HEATING

DIFFERENT TYPES of wood have different burning qualities. Generally hardwoods give off more heat per unit of volume, but softwoods may be easier to light. Coal or coke can also be used but you'll generally need wood to get the fire going. A kilogram of wood will typically produce 16.2 MJ, coal 28.0 MJ and coke 28.5 MJ. However, much of the heat energy given off is likely to be lost as air, smoke and heat escape through the chimney or flue. Installation costs can be high, because you need the chimney or flue, and you'll need to store the fuel, too. Costs vary but wood's likely to be much cheaper if bought in bulk. There are also the problems of cleaning and disposing of ash to take into consideration.

### *Open fires*

The warmth of an open fire is something we can all relate to, but despite the visual effectiveness at least 75% of the heat goes straight up the chimney. Heat distribution is mainly radiant, because warm air is sucked up the chimney.

**Typical efficiency:** up to 25%

**Running costs** (for useful heat): $$$$$ (less, of course, if you can get wood free of charge).

### *Stoves*

A stove can considerably enhance the heating performance of a fire. There are two distinct types, airtight and non-airtight. Airtight stoves operate on the 'starved air' principle, in which the air entering the fire is restricted to make the fuel load burn longer. This also gives a good control of the heat output. You'll need a chimney-like flue and there are siting considerations because stoves can get very hot. You should expect to pay from $1000.

**Typical efficiency:** 60% (airtight), 30% (non-airtight)

**Running costs** (for useful heat): $$$ (airtight), $$$$$ (non-airtight)

## GAS HEATING

PIPED GAS is available in certain areas of the country; elsewhere you'd need to use more expensive liquid petroleum gas (LPG) supplied from pressurised cylinders. You'll be charged per megajoule for mains gas (you'll get around 50 MJ per kg of LPG). Gas heaters can be flued (ie the products of combustion are vented outside) or unflued (gases vent to the room). Gas heaters can produce a lot of heat, so even if gas heating is cheaper than electric heating it won't necessarily mean lower bills — often people find they use the extra heating capacity to enable them to have a warmer home. This is because the heating capacity of a gas fire isn't limited in the same way as with plug-in electric heaters; for example, a typical portable unflued gas heater rated at 14 MJ can put out over one and a half times the heat of a portable electric heater (with its maximum rating of 2.4 kW).

### *Unflued heaters*

Because of concerns about the spent gases there are rules about minimum room sizes for unflued heaters, and in Victoria you're only allowed them if they're installed high on a wall (which effectively renders them useless). We also wouldn't advise using an unflued heater in a bedroom or bathroom. These gases contain a lot of water vapour and can cause condensation problems, and older gas heaters in particular may also give off fairly unhealthy fumes, which means rooms require good ventilation. Unflued heaters are usually portable and cheaper to install as they don't have to be built in, though you will need a gas point. These heaters come in a variety of sizes and types with heating capacities from around 8.5 MJ (with a heat output approximately equivalent to a 2.4 kW electric heater) to over 20 MJ. Heating can be convection and/or radiant; they may also have a fan to help distribute the warmed air. Typical cost for an unflued heater: $400 to $750.

**Typical efficiency:** 90%

**Running costs** (for useful heat): $

### *Flued heaters*

Flued gas heaters come in a range of guises. They can warm by radiating heat or by convection or both, depending on the design. The spent gases are vented outside, so they are less efficient than unflued heaters (because heat is lost that way too). Costs vary widely, but a convection room heater for a medium-sized room might cost $800, and a wall furnace for a large room well over $1000.

**Typical efficiency:** 75%

**Running costs** (for useful heat): $$

# ELECTRIC HEATING

ELECTRICITY can heat in two ways — resistive heating or by using a heat pump (reverse-cycle air conditioning). Resistive heating is by far the commonest and involves electricity heating a coil of wire; this heat is then distributed by convection (often aided by a fan) or radiation. See below for an explanation of reverse-cycle air conditioning.

Electric heaters themselves are very efficient, but there are considerable losses during generation and transmission of electricity to your home. This can mean that although appliance efficiency is 100% only about 30% of the original energy is available for your use. One kilowatt hour (kWh) is the equivalent of 3.6 MJ.

### *Resistive instantaneous heating*

These heaters come in a range of different guises. Radiant and fan heaters are good for 'personal' heating, convection heaters for heating up a room. Portable heaters have a maximum output of 2.4 kW (8.6 MJ), so you may find you need to use more than one heater.

**Efficiency:** close to 100%
**Running costs** (for useful heat): $$$$

### *Night storage heaters (heat banks)*

Off-peak electricity available at night is used to heat bricks, say, in the unit which will store the heat. This heat is then released as it's needed later in the day. This can be an efficient form of heating, but doesn't offer the flexibility of more instant heating, and you may find you need additional heat available to supplement its output.
**Efficiency:** close to 100%
**Running costs** (for useful heat): $

### *Reverse-cycle air conditioning*

Reverse-cycle air conditioning uses electricity to 'pump' heat from one place to another. Even on a cold day, heat can be pumped from outside to warm a room — though air conditioners lose efficiency if the outside temperature drops below 7°C. The appliances look the same as normal air conditioners, and can be used for cooling in the summer too. Expect to pay $800 to $1200 for a 2.5 kW model (suitable for a medium-sized lounge room or large bedroom).
**Typical efficiency:** around 250% — ie more heat output than electrical energy input; lower if it's very cold outside.
**Running costs** (for useful heat): $

# OTHER HEATING OPTIONS

There are options we haven't covered in this report. These require more in the way of installation and include ducted air central heating and underfloor electric slab heating, in which hot water is pumped around the home and heat released from panel radiators, skirting convectors or through a concrete slab floor.

## RUNNING COSTS

THE running costs of heating will depend on the cost of fuel in your area, because prices vary around the country, as does availability. To work out the cost per megajoule of heat you need to divide the cost of the fuel by the heating value. The heating value in megajoules for solid fuel is shown in the summary information; for electrical appliances multiply their kW rating by 3.6 to get the figure in MJ. For example, if wood is available for $140 a tonne (ie 14 cents per kilogram) the cost per megajoule is 14 cents divided by 16.2 MJ = 0.86 cent. However, this is only the amount of energy you'll get, not the amount of useful heat. To find this you need to divide the figure by the efficiency figure and multiply the total by 100. So the cost per useful megajoule of wood in an open fireplace is (0.86/25) x 100 = 3.4 cents per megajoule. If, however, you bought wood by the 40 kg bag at $13, the cost per useful megajoule shoots up to (2/25) x 100 = 8 cents per megajoule.

For our ratings on this page we have used fuel costs for Sydney.

- **Wood:** (bulk) $140 per tonne, $13 for 40 kg bag.
- **Electricity:** off-peak 3.72 cents/kWh, continuous 10.25 cents/kWh.
- **Gas:** general domestic rate 1.24 cents/MJ.

For gas and electricity these are the continuing rates after an initial amount is used (charged at a higher rate). The running costs show relative costs per megajoule of useful energy, with the more $$$s the higher the cost. Information from The Energy Information Centre (NSW).

## CHOICE TEST REPORTS

IN THE PAST we've tested many different heating appliances; below are listed the most recent tests. Prices quoted are those current at the time of publishing the tests, but give an idea of the price range for each type of heater.

- **Flued gas heaters**, April 1993: Test of six appliances priced from around $925 to $1775.
- **Reverse-cycle air conditioners**, November 1992: Test results for eight appliances priced from $600 to $1200.
- **Unflued gas heaters**, April 1992: 12 heaters tested, prices from around $350 to $650.
- **Radiant heaters**, May 1991: Test of eight radiant heaters priced from around $40 to $200.
- **Fan heaters**, May 1990: Test of 14 heaters priced from around $50 to $80.
- **Wood-burning stoves**, May 1987: Test of 11 stoves priced from around $700 to $1500.
- **Electric oil-filled heaters**, June 1984: Test of six appliances priced at that time from around $100 to $165.

### *Which type of heater?*

The question to answer is whether you want to heat a whole room, or just parts. For example, a family with a large living area where people pursue different activities in different areas is likely to want to heat the whole room, while for the one family member tucked upstairs studying it's probably sufficient to have a heater directed at the desk. If you don't need to heat the whole room there'll be considerable savings in both energy and cost.

A heater can warm a room in two ways: convection heating and radiant heating. Convection heating works by heating the air — the hot air then rises and cooler air from the room is drawn to the heated parts of the appliance. This results in a circulation of air in the room — called convection — and allows the heat to spread. The process may be hastened by using a fan. Radiant heating is the result of infrared radiation from the heater, and will feel warm on exposed skin.

Different types of heater suit different parts of the home. Here are some guidelines to use when selecting an appliance:

■ **For general living areas.**
In living areas such as the lounge room, dining room or family room convection heating works best. For localised heat — to warm your toes perhaps — choose a small (say 1 kW) radiant heater. Electric fan heaters are handy to bring a small room quickly to a comfortable temperature, and also to provide localised heat. However, they can be noisy and encourage draughts.

■ **In the kitchen and bathroom.**
Portable electric and unflued gas heaters are not suitable for bathrooms, and for safety it's wise to choose wall-mounted heaters in kitchens, too. A fixed radiant or fan heater directed toward where you wash or work will do the job.

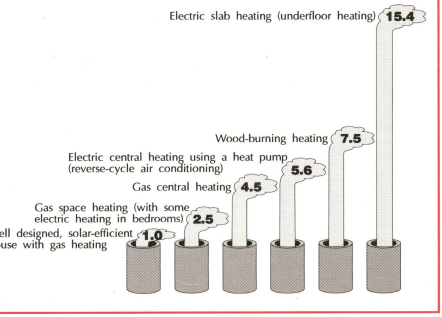
■ **For bedrooms.**
You need safe, quiet, controlled heat. Electric oil-filled convection heaters or wall-mounted panel heaters are most suitable, or a *flued* gas heater. Make sure any heater which is to be left on all night has a thermostatic fuse or cutout which will operate if the appliance topples over or overheats.

How well a heater will warm you (its effectiveness) is one thing — a heater with a fan could actually make you feel cooler if you sit in the breeze created — but there's also the question of energy efficiency. On the previous page we've shown typical appliance efficiency — how good the appliance is at converting the fuel energy input into usable heat. An electric radiant heater converts virtually all the electrical energy supplied to useful heat — there's almost no waste — and a typical flued gas heater will manage around 75%, while at least 75% of the heat from an open fire is lost up the chimney. ❑

## BURNING GREEN?

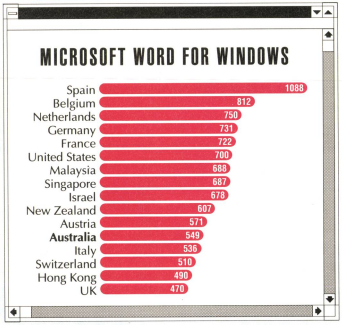
WHICH ENERGY SOURCE is the most environmentally friendly is a difficult question to answer. The reality is that the green choice when it comes to energy is better home design to take advantage of the sun, and to keep the heat that is already inside indoors. Electricity generated by burning of coal is the worst offender when it comes to the production of greenhouse gases — though with the use of energy-efficient reverse-cycle air conditioners electricity can look better.

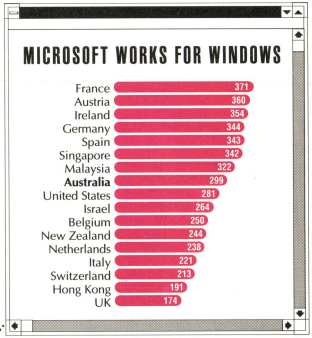
The Greenhouse Unit in Victoria has estimated the greenhouse gases produced in heating a typical Victorian house. The figures are for tonnes of $CO_2$ (or of other greenhouse gases which have the equivalent warming effect) produced per annum. For more details see *The greenhouse effect*, CHOICE, October 1992.

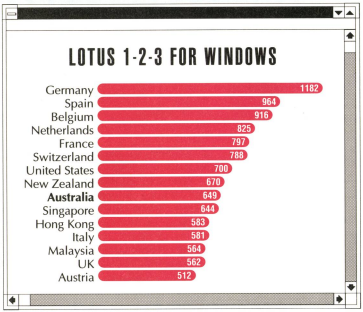


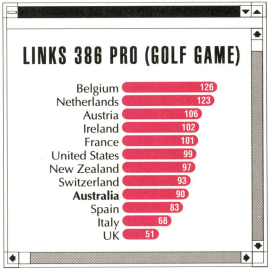
SHOPPING AROUND

# COMPUTER SOFTWARE




- Where programs are available in both English and the language of the country, we have used the price for the English version.
- Where a range of prices was provided, we have used the lowest. Recommended retail prices only were provided in the case of the United States and Belgium.
- All prices are in Australian dollars, based on exchange rates quoted in the *Australian Financial Review*, March 4, 1993.

# Perfumes

*Testers sniffed and scrutinised 94 perfumes to help you choose among these very personal purchases.*

SUBTLETY, refinement, seduction, mystery ... For centuries, perfumes have aroused curiosity, even passion. One of the oldest of cosmetics, perfumes predate the Egyptians. Extracts from spices, flowers and plants such as cinnamon, clove, eucalyptus, jasmine, rose, lavender and lilac have remained in use for millennia. More recently, other materials such as musk extract and ambergris have been derived from animals for use in fragrances.

Today, however, to feed demand fuelled by mass marketing, perfumers turn as well to new, synthetic sources of fragrances. The reasons are largely economic. Natural essences can only be produced in limited amounts and are therefore expensive. Synthetic products are cheaper: their use also allows infinitely more varied blends.

While some perfumes may trade on the superiority of natural essences, all contain both natural and synthetic ingredients. From a dermatological point of view, natural products are no safer than synthetics. In fact, natural extracts are composed of many naturally occurring chemicals, some of which can cause sensitivities, while synthetic products are chemically purer.

As the results of the test of the 94 perfumes reported on here show, however, natural fragrances are still preferred: experts downrate perfumes in which synthetic scents dominate. But users didn't always agree with the expert 'sniffer'. Some of the best-liked fragrances didn't stack up particularly well technically.

## DOLLARS AND SCENTS

IS IT MORE ECONOMICAL to buy fragrances in the form of perfume or eau de toilette?

All products in a fragrance line are made from the same essence: what varies is the percentage of essence to alcohol and the strength of the alcohol. A higher percentage of essence produces a stronger, more pronounced and longer-lasting scent, while a higher-proof alcohol (pure alcohol is 200 proof) will evaporate more rapidly, dispersing the scent as it does.

While there are no hard and fast rules about these proportions, perfume, or perfume extract, is generally 20–25% essence diluted in 90–95 proof alcohol. Eau de toilette is five to eight per cent perfume essence diluted in 80–90 proof alcohol. You may also come across other names such as *parfum de toilette, eau de parfum* and *esprit de parfum* that are less precisely defined variations on the theme of diluted extracts. The more diluted products have become increasingly popular as the price of true perfume extract has soared.

Using these percentages, when you're faced with the choice between perfume and eau de toilette, you can calculate which product is the better value. While the perfume, for example, may be three to five times more concentrated than the eau de toilette, it may well cost 10 times as much: that makes the essence three to four times more expensive in the perfume form of fragrance than in the eau de toilette version. Perfumes have more staying power than the other types of product, but they're used in such a minute quantity that their smell may not last longer. On the other hand, because it's less concentrated you tend to apply eau de toilette more liberally than perfume. In the long run you might use two or three bottles of eau de toilette to one of perfume, and end up paying around the same. Perhaps the best advice is to decide which to buy based on how often and how liberally you use the perfume.

## THE SCENT SYMPHONY

A typical perfume formula can call for 60 to 100 different products, all of which sound a different 'olfactory note'. These products are classed by family:

- Woods — patchouli, vetiver, cedar, sandalwood.
- Animal — musk, amber, civet.
- Spice — clove, cinnamon, ginger.
- Floral — carnation, jasmine, rose, lily of the valley.
- Lavender — lavender, rosemary, thyme, marjoram.
- Vanilla — vanilla, benzoin.
- Citrus — orange, mandarin, lemon.

The selected ingredients are distilled and blended to form a concentrate. The concentrate is dissolved in alcohol and allowed to age anywhere from a few weeks to many months, during which certain chemicals react with each other to form the desired scent. This is the perfume essence that is diluted with alcohol in different proportions to yield perfume, eau de toilette, cologne and other scented products.

Accurately reproducing this same fragrance over decades is obviously a challenge since the quality of essences can vary from year to year: a wet, cold year, for instance, will give poor-quality flowers.

Photographs taken at the Paradise Perfumery, Neutral Bay, Sydney.

**So many perfumes to choose from — this article may help you decide.**

## Three fragrant phases

In composing a fragrance, the perfumer will choose scents that last for different lengths of time. That's why a perfume often smells quite different when it's put on from an hour later. The time between a perfume's application and the moment its scent becomes imperceptible is called the evaporation phase. During this time, the odour evolves continuously. With a well made perfume, this evolution is progressive and very harmonious.

Although the passage from one phase to another is — or should be — so smooth and pleasing as to be unnoticeable, experts distinguish three main stages in the development of the scent:

- The start or 'head note' is that first smell when the bottle is opened and during the first minutes following application. It's made up of the most volatile ingredients.
- The core is the longest part of the evaporation phase. It gives the perfume its staying power and persistence.
- The base, made up of less volatile ingredients, gives the perfume 'body'. It's what you smell when the perfume has almost entirely evaporated.

Incidentally, because perfume contains volatile ingredients, it keeps for longer in the dark and reasonably cool — not in a glass flask on the bathroom windowsill.

## Pricy luxury

The price of a perfume varies according to the cost of the ingredients, some of which — civet and musk, for example — are very expensive. To that are added the costs of research and development, presentation, packaging, advertising and distribution. The price also takes into account the product's originality and the prestige of the perfume house.

When a new perfume is a variation of a known scent or an adaptation of a product that's been on the market for a long time — and many perfumes are close cousins of each other — its price will be lower than that of an original perfume.

Increasingly today, the price of a perfume in particular reflects the cost of the advertising that accompanies its launch. In an effort to attract customers faced with an astonishingly large selection of perfumes, these aggressive marketing campaigns run into the mega-millions.

And while a high price won't deter anyone from buying a favourite scent, you should consider it if you're in the market for a new perfume. Prices for 50 millilitres of the eaux de toilette tested, for example, ranged from $23 for 125 mL of YVES ROCHER Chèvrefeuille to $420 for 30 mL of CARTIER Panthère. Neither scent did particularly well technically or won rave reviews.

## PERFUME PERILS

LIKE ANY OTHER cosmetic product, perfumes can cause allergic reactions, dermatitis and photosensitisation (skin eruptions and scars when exposed to sunlight) in some people. The culprits are usually some of the essential oils used.

Skin sensitisation from fragrances can become a major problem. You usually won't know you're sensitive until at least your second exposure — sometimes not until 40 or so exposures. But once sensitised to a chemical, you'll have to avoid all contact with it or risk dermatitis, which can sometimes be severe. Some people will also find themselves vulnerable to other chemicals similar to the one that caused the original problem.

Some of the ingredients that most commonly cause contact dermatitis (and their characteristic scents) include: cinnamon bark oil (cinnamon); clove oil (cloves); vanillin (vanilla); hydroxycitronella (linden blossoms); eugenol (cloves); citral (lemon, citrus, bergamot); diethyl maleate (green apples); fennel oil (bitter); Peru balsam (pine). But because so many scents go into making a perfume and there's no labelling of the ingredients, it's usually impossible to single one out. Choosing a fragrance product with a lower concentration of essence — such as an eau de toilette or a cologne — may help minimise skin sensitisation.

Photosensitivity occurs when the sun changes fragrance ingredients into chemicals that can cause rashes and burns and produce skin splotches even after other signs of skin irritation have disappeared. Normally the adverse reaction occurs after an hour or so of exposure once the fragrance has been applied. Avoid risks by not using fragrances in the sun and steer clear of scents of lemon, lime, orange or rue since the oils that produce them are more commonly associated with photosensitisation.

*Test courtesy of* ***Test-Achats*** *magazine (Association Belge des Consommateurs, Brussels) and* ***J'achète Mieux*** *(Fédération romande des consommatrices, Lausanne, Switzerland).*

*Translation: Michelle Hibler,* ***Canadian Consumer****.*

# EVALUATING THE FRAGRANCES

ALTHOUGH MOST PEOPLE choose their own perfume, fragrances are often given as presents. How do you choose? Nothing is more personal than one's taste in perfume, but certain objective criteria can help to narrow the field.

That's what our Belgian counterparts at *Test-Achats* magazine did, evaluating the technical merit and user preference of 94 well-known eaux de toilette.

Overall, more than half the tested eaux de toilette were rated 'good' technically — and that's a relief, given their high price. The newer perfumes on the market generally didn't rate well technically, however, mainly because their composition was not considered harmonious or because they lacked good ingredients. The lasting power for all was generally quite good.

Bear in mind, though, that a perfume that rated well technically won't necessarily please everyone or suit all skin types. That much is obvious from the user trial results. Even though choosing a perfume remains an intensely personal affair, you may want to begin the selection process by trying those perfumes that were rated highly technically and that pleased the most users (see *Gift list* on page 18 for more guidance).

# GUIDE TO OUR LIST OF PERFUMES

### *House/fragrance*

The scents are listed alphabetically by brands. If a perfume was called something other than eau de toilette, that designation is also given.

### *Volume and price*

Recommended retail price in March 1993. Whenever possible, the price is for a 50 mL 'splash' bottle — anything different is stated. Our survey of specialty shops and major retail outlets revealed that store prices generally reflect the distributor's recommended retail price.

If no volumes or prices are shown, it's because we're unable to locate the fragrance in Australia ('not available'). You'll probably find it duty-free abroad, however.

'Discontinued' indicates that the major agents are no longer importing that fragrance, though it may be available through specialty shops in some locations as well as overseas.

### *Technical testing*

Laboratory analyses are not suited to testing perfumes. It's still possible, however, to evaluate them objectively by calling on one of the few specialists in the field, a professional 'nose'. He was asked to rate each perfume technically, setting aside his personal taste. The criteria on which he based his evaluation are as follows and his comments about them are summarised in the list below:

■ **Natural or synthetic:** All perfumes contain both natural and synthetic fragrance extracts, but in differing proportions. According to experts, synthetic fragrances should never dominate — which unfortunately often happens since they're less expensive.

■ **Harmonious composition:** The evaporation phase starts as soon as the perfume is applied to the skin. As the ingredients are more or less volatile, their odours aren't all perceived at the same time. In a well made perfume, the odour evolves very gradually throughout the evaporation phase, without clashes or jolts, and the perfume's characteristic scent is detectable throughout.

■ **Diffusion:** A good perfume must never be 'flat' but must have depth and diffuse well.

■ **Staying power** on the skin must be adequately long.

■ **Scoring:** Technical ratings are given as stars, with ★★★★★ being the highest score and ★ the lowest.

### *Some definitions*

The following definitions may enhance your understanding of some of the technical descriptions.

■ 'Modern' perfumes include many synthetic ingredients.

■ 'Fantasy' perfumes contain aroma chemicals that, for example, soften floral fragrances.

■ 'Balsamic' perfumes contain oriental resins.

■ 'Suave' means the perfume is smooth.

■ Chypre — the perfume has a woody note.

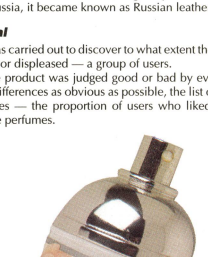
■ Patchouli — an ingredient that gives a dry/woody note.

■ Leather — includes birch tree tar; originally used to waterproof shoes in Russia, it became known as Russian leather.

### *User trial*

This test was carried out to discover to what extent the perfumes pleased — or displeased — a group of users.

No one product was judged good or bad by everyone. To make the differences as obvious as possible, the list only shows the extremes — the proportion of users who liked and who disliked the perfumes.




**Cacharel's Anaïs Anaïs was the 'top scorer' in our test, being liked by 50% of trialists and rating five stars from the expert 'nose'. Other well-liked perfumes are pictured on the following pages.**

## ALAIN DELON

**Le Temps d'Aimer** not available
Balsamic, fruity, then very floral.
*Technical testing:* ★★★★★
*User trial:* 30% liked, 10% disliked.

## AZZARO

**Azzaro** not available
Modern; sandalwood with a fruity touch.
*Technical testing:* ★★
*User trial:* 20% liked, 40% disliked.
Discontinued.

**No 9** 50 mL/$45
Green, floral (hyacinth and tuberose).
*Technical testing:* ★★★½
*User trial:* 40% liked, 30% disliked.

## BALMAIN

**Ivoire** 50 mL/$65
Balsamic, floral (clover and hyacinth).
*Technical testing:* ★★★★
*User trial:* 40% liked, 20% disliked.

## BENETTON

**Colors** 50 mL/$42.50
Heavy and sweet fragrance of a type found in men's perfumes. Start includes a green note reminiscent of cut green beans that is badly integrated into the whole. Lacks subtlety.
*Technical testing:* ★★
*User trial:* 30% liked, 30% disliked.

## CACHAREL

**Anaïs Anaïs** 50 mL/$61
Floral (hyacinth).
*Technical testing:* ★★★★★
*User trial:* 50% liked, 20% disliked

**Loulou** 50 mL/$69 (eau de parfum)
Fairly heavy with a powdery base. Lacks depth and subtlety.
*Technical testing:* ★★
*User trial:* 30% liked, 30% disliked.

## CARON

**Fleurs de Rocaille** 50 mL spray/$86
Very floral (iris), delicate and traditional.
*Technical testing:* ★★★★★
*User trial:* 30% liked, 40% disliked.

**Nocturnes** 50 mL/$80
Balsamic, soft (sandalwood) and floral.
*Technical testing:* ★★★
*User trial:* 30% liked, 20% disliked.

## CARTIER

**Must** 50 mL spray/$270
Fresh, floral, but lacks character.
*Technical testing:* ★★½
*User trial:* 30% liked, 20% disliked

**Panthère** 30 mL/$420
Spicy with floral and fruity notes on heavy animal base. Lacks subtlety.
*Technical testing:* ★★½
*User trial:* 30% liked, 30% disliked.

## CARVEN

**Guirlandes** not available
Floral with touches of clover.
*Technical testing:* ★★
*User trial:* 40% liked, 20% disliked.

**Ma Griffe** 50 mL/$75
Modern fantasy perfume.
*Technical testing:* ★★
*User trial:* 20% liked, 30% disliked

**Madame** not available
Balsamic, floral, heavy (strong tuberose notes).
*Technical testing:* ★★★★★
*User trial:* 30% liked, 20% disliked.

## CHANEL

**Coco** 75 mL /$100
Sweet, heavy, amber notes.
*Technical testing:* ★★★★
*User trial:* 30% liked, 40% disliked.

**Cristalle** 50 mL/$61
Fresh, green.
*Technical testing:* ★
*User trial:* 30% liked, 40% disliked.

**No 5** 50 mL/$72
Fantasy perfume with discordant notes at the start, then exceptionally good.
*Technical testing:* ★★★½
*User trial:* 30% liked, 30% disliked.

**No 19** 50 mL/$72
Rich with strong notes of iris and Bulgarian rose.
*Technical testing:* ★★★★★
*User trial:* 30% liked, 30% disliked.

## CHRISTIAN DIOR

**Diorella** 54 mL /$78
Light, floral (jasmine and lavender).
*Technical testing:* ★★★
*User trial:* 30% liked, 30% disliked
Discontinued.

**Dioressence** 54 mL /$83.50
Strong touch of geranium, rather like a fine shaving soap.
*Technical testing:* ★★★★
*User trial:* 20% liked, 50% disliked.
Discontinued.

**Diorissimo** 54 mL /$78
Light, floral (jasmine)
*Technical testing:* ★★★
*User trial:* 40% liked, 20% disliked

**Miss Dior** 54 mL /$78
Fresh, fancy perfume, touches of green lavender.
*Technical testing:* ★★★
*User trial:* 30% liked, 40% disliked

**Poison** 50 mL/$128
Spicy, suave with dominant notes of tuberose, disagreeable at the start.
*Technical testing:* ★
*User trial:* 30% liked, 50% disliked

## CLAUDE MONTANA

**Montana** not available
This heavy, intrusive perfume has an unfinished odour, marred by a pronounced faecal note.
*Technical testing:* ★
*User trial:* 40% liked, 30% disliked

## COURREGES

**C In Blue** not available
Floral, lacks character.
*Technical testing:* ★★
*User trial:* 40% liked, 20% disliked

## ESTEE LAUDER

**Cinnabar** 50 mL spray/$68
Heavy Chypre perfume with patchouli note.
*Technical testing:* ★★½
*User trial:* 30% liked, 40% disliked

**Knowing** 50 mL/$75
Fantasy perfume built on a woody and balsamic base. Floral notes such as rose are detectable. Rather flat and lacking in character.
*Technical testing:* ★★
*User trial:* 40% liked, 20% disliked

## GIANFRANCO FERRE

**Gianfranco Ferre** 50 mL/$79
Floral perfume with notes of jasmine, ylang-ylang and tuberose. A warm balsamic base supports the composition from the start.
*Technical testing:* ★★★★
*User trial:* 50% liked, 20% disliked

## GIANNI VERSACE

**G. Versace** 50 mL/$85
Fantasy balsamic perfume in the amber group.
*Technical testing:* ★★★★
*User trial:* 30% liked, 30% disliked

## GIORGIO ARMANI

**G. Armani** 50 mL/$83
Floral with touches of clover and hyacinth.
*Technical testing:* ★★★★
*User trial:* 40% liked, 20% disliked

## GIVENCHY

**Givenchy III** 50 mL spray/$49
Fantasy perfume with notes of patchouli and leather.
*Technical testing:* ★★
*User trial:* 30% liked, 40% disliked

**Ysatis** 50 mL/$73
Rather heavy and warm with notes of sandalwood and jasmine.
*Technical testing:* ★★★★
*User trial:* 40% liked, 20% disliked

## GLORIA VANDERBILT

**Vanderbilt** 50 mL/$45
Sweet, powdery perfume built on a balsamic base. Good diffusion.
*Technical testing:* ★★★★
*User trial:* 40% liked, 50% disliked

## GRES

**Cabochard** 50 mL/$79
Suave, woody with touches of Russian leather.
*Technical testing:* ★★
*User trial:* 20% liked, 40% disliked

## GUERLAIN

**Chamade** 50 mL spray/$83
Fantasy floral, fruity perfume.
*Technical testing:* ★★★★½
*User trial:* 20% liked, 40% disliked

**Mitsouko** 50 mL/$86
Feminine leather perfume.
*Technical testing:* ★★★★★
*User trial:* 20% liked, 40% disliked

**Shalimar** 50 mL/$75
Heavy, sweet with notes of cinnamon, saffron and vanilla.
*Technical testing:* ★
*User trial:* 20% liked, 50% disliked

## GUY LAROCHE

**Clandestine** not available
Rather heavy floral perfume with a certain lack of subtlety.
*Technical testing:* ★★★
*User trial:* 40% liked, 20% disliked

**Fidji** 50 mL/$71
Green, floral (hyacinth and mignonette).
*Technical testing:* ★★★★★
*User trial:* 30% liked, 20% disliked

**J'ai osé** not available
Fantasy perfume with strong patchouli notes.
*Technical testing:* ★★★
*User trial:* 30% liked, 40% disliked

## HELENA RUBINSTEIN

**Barynia** not available
Floral (rose, jasmine, iris) on amber base.
*Technical testing:* ★★★★★
*User trial:* 20% liked, 20% disliked

## HERMES

**Amazone** 50 mL/$94.50
Modern, floral.
*Technical testing:* ★★
*User trial:* 30% liked, 20% disliked
Discontinued.

**Calèche** 50 mL/$98.50
Modern, floral with spicy notes.
*Technical testing:* ★★★★
*User trial:* 30% liked, 30% disliked

## JACOMO

**Silences** 50 mL/$59.50
Rich, floral (rose and iris).
*Technical testing:* ★★★★★
*User trial:* 30% liked, 20% disliked

## JEAN-LOUIS SCHERRER

**J.L. Scherrer** not available
Floral with a patchouli base.
*Technical testing:* ★★★
*User trial:* 30% liked, 30% disliked

## JEAN-MARC SINAN

**Sinan** not available
Fantasy perfume. Fragrance of rose built on a base of patchouli and sandalwood.
*Technical testing:* ★★★
*User trial:* 40% liked, 10% disliked

## JEAN PATOU

**Joy** 60 mL/$168
Very floral with green note.
*Technical testing:* ★★★★
*User trial:* 30% liked, 50% disliked

## JILL SANDER

**Woman Two** not available
Fantasy perfume.
*Technical testing:* ★
*User trial:* 30% liked, 20% disliked

## KRIZIA

**K** 50 mL/$68
Sweet, fantasy perfume with strong notes of sandalwood.
*Technical testing:* ★★★½
*User trial:* 50% liked, 20% disliked

## KENZO

**Kenzo** 50 mL spray/$85
Fantasy perfume with floral and fruity notes. Built on a heavier balsamic base. Lacks depth and subtlety.
*Technical testing:* ★★
*User trial:* 30% liked, 30% disliked

## LAGERFELD

**Chloë** 60 mL/$67.50
Delicate, fruity, of the tuberose group.
*Technical testing:* ★★★★½
*User trial:* 20% liked, 30% disliked

**KL** not available
Heavy, in the Chypre group.
*Technical testing:* ★★★
*User trial:* 20% liked, 50% disliked

## LANCASTER

**Eau de Lancaster** not available
Fresh perfume in which masculine notes of fern are well represented. Lacks fullness.
*Technical testing:* ★★
*User trial:* 20% liked, 20% disliked

## LANCOME

**Magie Noire** 50 mL/$65
Green, floral and spicy.
*Technical testing:* ★
*User trial:* 20% liked, 30% disliked

**Ô** 75 mL spray/$55
Fresh, floral with leather notes.
*Technical testing:* ★★
*User trial:* 30% liked, 30% disliked

**Trophé** not available
Floral with touches of lavender
*Technical testing:* ★★
*User trial:* 20% liked, 40% disliked

## LANVIN

**Clair de Jour** not available
Suave, floral with notes of cyclamen and amber.
*Technical testing:* ★★★★
*User trial:* 30% liked, 10% disliked
Discontinued.

**Eau Arpège** 50 mL/$65
Modern, suave floral (rose).
*Technical testing:* ★★★★
*User trial:* 30% liked, 20% disliked

## LAURA BIAGIOTTI

**Roma** not available
After a lemony start, a heavy sweet odour appears. Like many heavy perfumes it lacks subtlety.
*Technical testing:* ★★
*User trial:* 30% liked, 30% disliked

## LEONARD

**Balahé** not available
Balsamic, suave, floral on a very powdery base.
*Technical testing:* ★★★★★
*User trial:* 40% liked, 20% disliked

## MAX FACTOR

**Le Jardin** 50 mL spray/$24.95
Delicate and fresh, floral (tuberose) on fruity base.
*Technical testing:* ★★★★½
*User trial:* 40% liked, 10% disliked

## MAXIMS DE PARIS

**Maxims** 50 mL/$29
Suave, floral with sandalwood notes.
*Technical testing:* ★★★★
*User trial:* 40% liked, 20% disliked

## MISSONI

**Aria** 50 mL/$79
Floral perfume with fruity jasmine note. Built on balsamic base. Lacks fullness.
*Technical testing:* ★★★½
*User trial:* 30% liked, 40% disliked

**Missoni** not available
Rather heavy with distinct patchouli notes on amber base.
*Technical testing:* ★★½
*User trial:* 30% liked, 30% disliked

## MOLYNEUX

**Quartz** not available
Fresh, floral (green hyacinth), amber on a fruity base.
*Technical testing:* ★★★★
*User trial:* 40% liked, 10% disliked

**Vivre** not available
Floral but flat and without character.
*Technical testing:* ★
*User trial:* 40% liked, 30% disliked

## MOSCHINO

**Moschino** 45 mL/$79
Heavy, sweet perfume with amber notes in its base. Lacks subtlety.
*Technical testing:* ★★
*User trial:* 30% liked, 40% disliked

## NINA RICCI

**Fleurs de Fleurs** 50 mL spray/$72
Delicate bouquet of rose, jasmine, iris, etc.
*Technical testing:* ★★★★★
*User trial:* 30% liked, 30% disliked

**Van Cleef & Arpels First**

**L'Air du Temps** 50 mL/$69
Very delicate and floral (carnation).
*Technical testing:* ★★★★★
*User trial:* 30% liked, 30% disliked

**Nina** 50 mL/$75
Fantasy perfume, floral, delicate and elegant. Very harmonious composition. Technically excellent in all aspects.
*Technical testing:* ★★★★★
*User trial:* 30% liked, 30% disliked

## OSCAR DE LA RENTA

**Oscar de la Renta** 60 mL /$85
Heavy and sweet fantasy perfume of the musk and orange blossom type.
*Technical testing:* ★★★½
*User trial:* 30% liked, 20% disliked

## PACO RABANNE

**Eau de Calandre** 50 mL spray/$75
Modern, floral on a heavier base.
*Technical testing:* ★★★★★
*User trial:* 30% liked, 30% disliked

**Eau de Métal** not available
Fresh, green floral (hyacinth).
*Technical testing:* ★★★★
*User trial:* 40% liked, 20% disliked
Discontinued.

**La Nuit** 50 mL/$75
Of the Chypre category, notes of oak moss, pepper and amber.
*Technical testing:* ★★★★
*User trial:* 50% liked, 30% disliked

## PALOMA PICASSO

**Paloma Picasso** 50 mL spray/$108
Spicy fantasy perfume with amber notes.
*Technical testing:* ★★★½
*User trial:* 40% liked, 30% disliked

## PIERRE CARDIN

**Choc** not available (eau de parfum)
A fresh start of bergamot but very soon loses character.
*Technical testing:* ★
*User trial:* 30% liked, 20% disliked

**Paradoxe** not available (eau de parfum)
Lacks character, liquorice note.
*Technical testing:* ★
*User trial:* 20% liked, 30% disliked

## REVLON

**Eau de Charlie** 50 mL spray/$24.95
Fresh, floral (jasmine)
*Technical testing:* ★★½
*User trial:* 30% liked, 40% disliked

## ROCHAS

**Byzance** 50 mL/$80
Heavy, sweet perfume with notes of tube-rose. Also spicy ingredients.
*Technical testing:* ★★★
*User trial:* 30% liked, 40% disliked

**Lumière** 50 mL/$61 (eau de parfum)
Floral (jasmine and orange blossom).
*Technical testing:* ★★
*User trial:* 30% liked, 40% disliked

**Madame Rochas** 50 mL/$80
Modern fantasy perfume with floral notes on heavier, woody, balsamic base.
*Technical testing:* ★★★★★
*User trial:* 30% liked, 30% disliked

**Mystère** 50 mL/$62 (eau de parfum)
Floral with fantasy notes.
*Technical testing:* ★★★★
*User trial:* 30% liked, 20% disliked

## ROGER AND GALLET

**Open** 50 mL/$40
Spicy with synthetic pineapple note.
*Technical testing:* ★★
*User trial:* 40% liked, 30% disliked

## SALVADOR DALI

**Salvador Dali** 50 mL spray/$99 (parfum de toilette)
Balsamic and suave on a floral base.
*Technical testing:* ★★★★
*User trial:* 40% liked, 20% disliked

## ULTRA COSMETICS

**Boucheron** 50 mL/$103
Sweet and floral fantasy perfume built on a balsamic base.
*Technical testing:* ★★★
*User trial:* 20% liked, 40% disliked

## UNGARO

**Diva** 40 mL spray/$108
Suave and heavy fantasy perfume of the Chypre and amber group.
*Technical testing:* ★★★★
*User trial:* 30% liked, 40% disliked

## VAN CLEEF & ARPELS

**First** 60 mL/$105
Modern fantasy perfume with very floral notes.
*Technical testing:* ★★★★
*User trial:* 50% liked, 20% disliked

## WORTH

**Je Reviens** 50 mL spray/$68.60
Heavy and suave fantasy perfume.
*Technical testing:* ★★★½
*User trial:* 30% liked, 40% disliked

## YVES ROCHER

**Chèvrefeuille** 125 mL/$23
Fresh and floral.
*Technical testing:* ★★★
*User trial:* 30% liked, 30% disliked

**Magnolia** 100 mL/$35
Soft, floral on amber base.
*Technical testing:* ★★★
*User trial:* 30% liked, 30% disliked

**Orchidée** 100 mL/$33
Fresh, floral perfume with hyacinth note that evolves gradually in another direction, notably towards amber.
*Technical testing:* ★★½
*User trial:* 40% liked, 40% disliked

## YVES SAINT-LAURENT

**Opium** 50 mL spray/$98
Sweet, heavy perfume of the oriental type.
*Technical testing:* ★★★★
*User trial:* 50% liked, 20% disliked

**Paris** 50 mL spray/$92
Fresh, floral perfume with a delicate note of violets that remains detectable throughout the evaporation phase and evolves gradually towards a delicate warm note of incense.
*Technical testing:* ★★★★
*User trial:* 50% liked, 20% disliked

**Y** 50 mL spray/$69
Floral with patchouli notes.
*Technical testing:* ★★★
*User trial:* 20% liked, 30% disliked

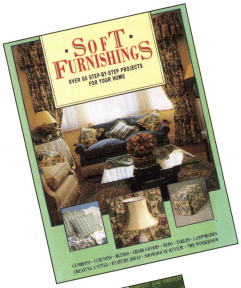
**Yves Saint-Laurent Opium**

## GIFT LIST

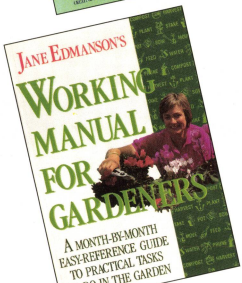
THE FOLLOWING is a list of scents to sample if you are attempting to buy perfume as a gift. They are a selection of the top technical performers and the perfumes most liked/least disliked by the user panel. Check the description in the profile to ensure the perfume has the qualities you're looking for. For example, if the person you are buying for usually wears Christian Dior's Diorissimo, which is a floral, select other florals from the list (such as Anaïs Anaïs). Price has not been considered in our selections, and we've left out any not available in Australia.

**CACHAREL Anaïs Anaïs**
**GIANFRANCO FERRE**
**PACO RABANNE La Nuit**
**VAN CLEEF & ARPELS First**
**YVES SAINT-LAURENT Opium**
**YVES SAINT-LAURENT Paris**
**KRIZIA K**
**MAX FACTOR Le Jardin**
**BALMAIN Ivoire**
**GIORGIO ARMANI**
**GIVENCHY Ysatis**
**MAXIMS DE PARIS Maxims**
**SALVADOR DALI**

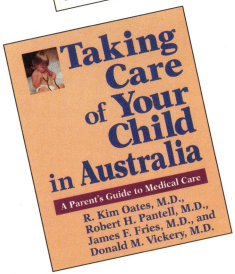
# CONSUMER BOOKSHELF



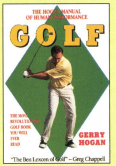

**SOFT FURNISHINGS**
**$29.95 hardcover 192pp**
This illustrated guide will help you make soft furnishings. It includes instructions for cushions, curtains, blinds, lampshades and chair, bed and table covers, plus hints on equipment, fabrics, and ideas for co-ordinating your decor.


JANE EDMANSON'S
WORKING MANUAL FOR GARDENERS
A MONTH-BY-MONTH EASY-REFERENCE GUIDE TO PRACTICAL TASKS TO DO IN THE GARDEN

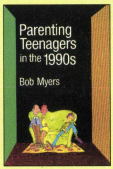
**WORKING MANUAL FOR GARDENERS**
**$19.95 paperback 159pp**
A very good guide to what needs to be done in the garden month-by-month, with useful background information and helpful tips.


Taking Care of Your Child in Australia
A Parent's Guide to Medical Care
R. Kim Oates, M.D., Robert H. Pantell, M.D., James F. Fries, M.D., and Donald M. Vickery, M.D.

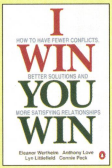
**TAKING CARE OF YOUR CHILD IN AUSTRALIA**
**A parent's guide to medical care**
**$28.95 paperback 486pp**
Sound medical advice about most of the complaints and diseases children are likely to encounter from conception to adolescence, plus advice on selecting a doctor, common tests, hospitalisation, safety at home, and useful medications. A valuable home reference.




**GOLF**
**The Hogan Manual of Human Performance**
**$24.95 hardcover 96pp illustrated**
Gerry Hogan explains what makes a successful golf swing. This book is all about getting you to swing the club with maximum mechanical efficiency.




**PARENTING TEENAGERS IN THE 1990s**
**$14.95 paperback 148pp**
This book provides practical help on setting limits, handling power struggles and communication gaps, and helping teenagers to make their own adult decisions.




**I WIN: YOU WIN**
**$16.95 paperback 260pp**
A team of Australian psychologists has written this guide to negotiation and conflict resolution skills, with case examples to illustrate their points.

# ORDER FORM

| BOOK | | No.req'd | Price ($) | Subtotal |
|---|---|---|---|---|
| Soft Furnishings | (FURNISH) | | 29.95 | |
| Working Manual for Gardeners | (GARDEN) | | 19.95 | |
| Taking Care of Your Child in Australia | (CARECHIL) | | 28.95 | |
| Golf – Hogan Manual | (GOLF) | | 24.95 | |
| Parenting Teenagers in the 1990s | (TEENAGER) | | 14.95 | |
| I Win: You Win | (IWINUWIN) | | 16.95 | |
| Power Learning | (POWER) | | 14.00 | |
| Your Business Now | (YOURBUS) | | 39.95 | |
| Collins Australian Do-it-yourself Manual | (COLLDIY) | | 49.95 | |
| Tasmania – Walks, Wildlife and Food | (TASMANIA) | | 16.95 | |
| The Survival Pest Pack | (PESTPACK) | | 15.00 | |
| The SBS Guide to Ethnic Eating (Sydney) | (SBSSYD) | | 14.95 | |
| The SBS Guide to Ethnic Eating (Melbourne) | (SBSMEL) | | 14.95 | |
| Big Brother | (BIGBRO) | | 16.95 | |
| Learned Optimism | (OPTIMISM) | | 17.95 | |
| Teach Yourself DOS | (DOS2) | | 14.95 | |
| Build Your Own Green Technology | (GREENTEC) | | 19.90 | |
| Teach Yourself to Meditate | (MEDITATE) | | 16.95 | |
| The Stockmarket | (STOCKMAR) | | 16.95 | |
| **Plus post & handling** | ($3.00 for one book plus $1.20 for each extra book) | | | |

**Folders** (postage & handling included in price)

☐ ____ red (BR) ☐ ____ black (BBL) ☐ ____ brown (BBR) 12.00

Qty Qty Qty

**Boxholders** (postage & handling included in price)

☐ ____ red (HR) ☐ ____ green (HG) ☐ ____ blue (HB) 12.00

Qty Qty Qty

**TOTAL $** _____

I enclose: cheque ☐ money order ☐ payable to the Australian Consumers' Association

OR: I wish to pay by: Mastercard ☐ VISA ☐ Bankcard ☐

Card no. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ Expiry date: ____/____

Signature _____

Mr/Mrs/Miss/Ms _____

First name Last name

Address _____

_____ Postcode _____

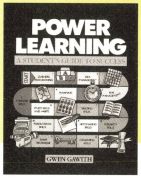
Phone (business hours) _____ 1M9304 INS

**SEND YOUR PAYMENT TO:**
AUSTRALIAN CONSUMERS' ASSOCIATION
57 Carrington Road, Marrickville 2204.
Phone: (02) 558 0099 Fax: (02) 558 9341

**POSTAGE & HANDLING**
$3.00 for one book plus $1.20 for each extra book ordered. Some books may have to be sent separately to keep postage costs down. This is due to Australia Post's vagaries, not ours. Please allow 3 to 4 weeks for delivery. We process the vast majority of orders the day we receive them, but sometimes stock replenishment means a delay while we await delivery, so please bear with us. If any order cannot be filled for a substantial length of time, we'll let you know and give you the option of cancellation.

**MONEY BACK GUARANTEE**
If you are not completely satisfied with your purchase, return book(s) within 30 days for full refund of the purchase price.

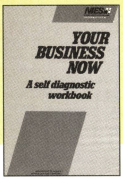
**BINDERS**
**Folders** hold 12 issues so you can leaf through a year of CHOICE, and come in red, black or brown.
**Box holders** file 24 copies at a time and come in red, green or blue.



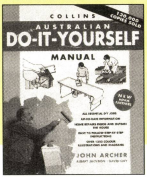

**POWER LEARNING**
**$14.00 paperback 135pp**
If you are a student, this very thorough, helpful book will help you identify your learning style and expand your repertoire of learning stategies.

**THE SURVIVAL PEST PACK**
**$15 paperback 70pp**
This handy little book will help you find and recognise the different types of pest which attack timber and prevent infestations occurring in the first place, and gives step-by-step instructions on what to do if you do find pests.

**TEACH YOURSELF DOS INCLUDING DOS 5**
**$14.95 paperback 216pp**
A new edition of this popular guide to the most common operating system for PCs, brought up to date with DOS 5.

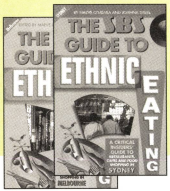



**YOUR BUSINESS NOW**
**$39.95 spiral bound 209pp**
This very thorough workbook helps you make a detailed evaluation of the performance of your business, and then develop overall judgments about future strategies.

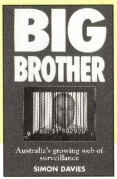



**COLLINS AUSTRALIAN DO-IT-YOURSELF MANUAL (new edition)**
**$49.95 hardcover 436 pp**
An accessible, fully illustrated and very comprehensive guide to how to carry out renovating, repair, maintenance and decorating projects in and around your home.

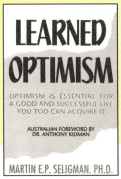
**TASMANIA – WALKS, WILDLIFE AND WONDERFUL FOOD**
**$16.95 paperback 174pp illustrated**
A delightful, inspiring and practical guide for anyone planning a holiday in Tasmania.




**The SBS Guide to Ethnic Eating – SYDNEY**
**The SBS Guide to Ethnic Eating – MELBOURNE**
**$14.95 paperback 214pp**
Two fascinating guides to the best places to eat (and to buy ingredients) for the many cuisines which can be sampled in these cities. Some treasured recipes are included.

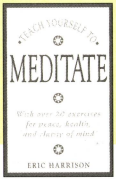



**BIG BROTHER**
**$16.95 paperback 184pp**
This book argues that the convergence of all the computerised information held on us could mean our society is close to being under total surveillance, with dire consequences for our civil liberties.

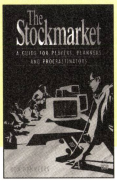

LEARNED
OPTIMISM
OPTIMISM IS ESSENTIAL FOR A GOOD AND SUCCESSFUL LIFE YOU TOO CAN ACQUIRE IT
AUSTRALIAN FOREWORD BY DR. ANTHONY KIZNAH
MARTIN E.P. SELIGMAN, PH.D.

**LEARNED OPTIMISM**
**$17.95 paperback 318pp**
Does Australia need to become the optimistic country? This book presents cogent arguments why optimism is relevant to our health and happiness, and also explains techniques for achieving an optimistic outlook.

**BUILD YOUR OWN GREEN TECHNOLOGY**
**$19.90 paperback 195pp**
Ideas for projects such as solar water systems, wind generators, waterwheels, 12- and 32-volt power systems, greenhouses, bicycle trailers, solar-, electric- and alcohol-powered vehicles, and a methane digester.




**TEACH YOURSELF TO MEDITATE**
**$16.95 paperback 162pp**
This is an easy-to-follow guide to meditation which teaches you both 'formal' and 'spot' meditation exercises which can be used to relax the body and overcome the effects of stress.




**THE STOCKMARKET**
**$16.95 paperback 240pp**
A very comprehensive, readable guide to the workings of the stockmarket and related markets, suitable for beginners or for those already involved.

# The CHOICE Enviro-challenge

*So you think you're a green consumer? The answers to our quiz might surprise you.*

AS CONSUMERS, the things we buy and do play an important part in the process of environmental degradation. More Australians are trying to choose products and modify behaviours so their lifestyle will have less impact on the environment. But while media coverage has raised awareness of the problems, it hasn't fully explained the consequences of our everyday choices or helped consumers figure out which behaviour changes are the most significant.

The difficulty is that environmental problems are complex, and much of the information reaching consumers is simplistic or incomplete. Although there are many positive changes taking place, 'saving the planet' has also become handy fodder for marketing hype and feel-good copy in the tabloid press. Even with the best will in the world, it's not too difficult to make the wrong decisions or misdirect your efforts.

Our quiz explores some of the links between consumer behaviour and environmental problems. Try it, and see how you go.

**1 Which type of beverage container is most widely recycled?**

**A)** Aluminium cans.
**B)** Glass bottles.
**C)** Milk cartons.
**D)** PET bottles.

## QUESTIONS ANSWERS

**1 A) Aluminium cans.**
Around 60% of aluminium beverage cans sold in Australia are currently recycled, compared with 35% to 40% of glass, around 33% of paper and 22% of PET bottles. This is a good recycling rate but, given that there is a good market for used aluminium cans — they are being made into new cans and manufacturers are paying a good price for returned cans — it could be better. Because aluminium is very energy-intensive to make from the raw materials and recycling results in very large energy savings and huge cuts in air pollution, not recycling aluminium cans represents a very significant waste of resources.

One aluminium producer, Comalco, told us it believes the missing 40% of cans are probably tossed away with the rubbish of householders who only have one or two cans, so don't feel it's worthwhile taking them to a recycler. It is planning to help overcome this problem by encouraging primary schools around Australia to become collection points for cans, then sell them to raise funds for the school.

**2 C) Driving at a moderate speed.**
Economical driving combined with regular maintenance is the best way to reduce the environmental impact of cars. All the options will increase fuel-efficiency and so reduce the amount of fuel used overall, which would reduce the amount of carbon dioxide emitted, a key to fighting global warming. However, driving at a moderate speed will result in the most significant reduction.

**2 Which of the following will most significantly reduce the amount of energy your car uses?**

**A)** Regular tune-ups.
**B)** Keeping the tyres properly inflated.
**C)** Driving at a moderate speed.
**D)** Not using the air conditioner.

**3 Which currently sold consumer product is a significant source of lead exposure?**

**A)** Oil-based house paint.
**B)** Hand-painted ceramics.
**C)** Lead-soldered tin cans.
**D)** Petrol.

**4 Of the following things you might do, which has the largest long-term impact on the environment?**

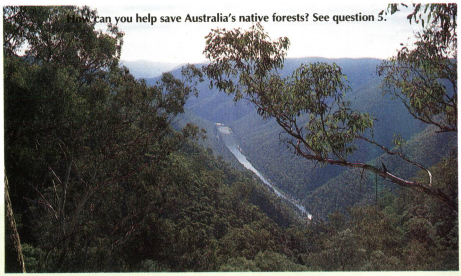
**A)** Buying plastic items.
**B)** Owning a car.
**C)** Having a child.
**D)** Not recycling your newspapers.

**5 Which of the following steps is an effective way to save Australian native forests?**

**A)** When building a house, ask for only plantation wood such as pine to be used.
**B)** Buy recycled paper products.
**C)** Use recycled timber from demolition yards and secondhand dealers wherever possible.
**D)** All of the above.

**6 The best way to dispose of used cooking oil is to:**

**A)** Recycle it.
**B)** Put it in a tightly closed container and throw out with the household garbage for collection.
**C)** Sprinkle it over the compost heap.
**D)** Pour it down the toilet.



How can you help save Australia's native forests? See question 5.

**3 D) Petrol.**
The exhaust from leaded petrol makes a significant contribution to blood lead levels, particularly in children who live or go to school on busy roads. Although all new cars manufactured and sold in Australia since 1986 use unleaded petrol, 67% of the cars on our roads — around five million cars — were made prior to that and are still using leaded petrol. Around 30% of those could be run on unleaded fuel without damage to the car. (The NRMA has a list of pre-1986 car models able to run on unleaded fuel. You can ring its Technical Advisory Service for a copy on (02) 260 9133 or, if you're outside Sydney, (008) 42 7423.) As well, the lead content in petrol could be reduced dramatically without affecting older cars.

House paints on the market today don't contain lead — they haven't since the 1970s — but old lead paints can still cause a problem. They can be breathed in or ingested when they're sanded or blowtorched off during home renovations, and when they begin to peel and fragments fall onto the floor, allowing them to be redistributed in the air through vacuuming. Small children may also sometimes ingest it when they eat garden soil contaminated by flaking lead paint.

Hand-made ceramics — particularly brightly glazed pottery — are potentially a problem, as lead can leach from the glaze into acidic foods like coffee, tomatoes and citrus juice. However, ceramics bought in Australia are not a cause for concern: the Commonwealth Government strictly controls the amount of lead that is allowed to leach from ceramic ware, both made here and imported. However, it could be a problem with some pottery bought while travelling overseas.

Some tin cans still have lead soldering which can leach into acidic contents (see *Choice Cuts*, January 1993). However, tinned food is not likely to a be significant source of lead exposure: around 90% of Australian canned food and all baby food canned here use welded cans, which contain no lead.

**4 C) Having a child.**
Population growth is a serious threat to the global environment. The world gains 90 million people each year — the equivalent of a new country the size of Mexico. While the population growth rate in Australia is not as great as in the developing world, it is still a concern. Consumers in wealthy industrialised countries like ours use a disproportionately large share of the Earth's finite resources, which in turn results in a correspondingly large amount of pollution. For example, in the USA each consumer gets through the equivalent of around 10 000 kilograms of coal per year in energy, compared to 69 kg worth in Bangladesh. This results in a per capita carbon dioxide ($CO_2$) emission rate in the US which is many, many more times that in Bangladesh. Australia produces the third highest per capita $CO_2$ levels, behind only Canada and the USA.

**5 D) All of the above.**
All these things would reduce the demand for timber from native forests. At the moment old-growth native eucalypt forests are being logged, although there is plenty of pine from plantations available. In construction, pine is widely used, though Australian hardwood and sometimes imported rainforest timbers are used for trim. Much of the wood used in paper manufactured in Australia comes from plantations, but around a third is from native forest. The paper industry argues that most of this wood comes from the refuse after trees have been sawn into timber for construction. However, we export around three million tonnes of wood chips from native forests to Japan, which is made into paper there.

**6 A), B) and C).**
If it is a small amount you could sprinkle it on your compost heap or, if you don't have space to compost, you could seal it in a container and throw it out with the household garbage for collection.

Used vegetable oil and animal fat waste can be recycled, mostly to be used in animal feed formulations. If you have large amounts of it you could try to find a company which accepts or collects it — your state environment protection agency may have a list.

You should never pour away any kind of oil or fat — down a drain, garbage disposal unit, toilet or anywhere it will end up in the sewerage system, as it is a beach and water pollutant.

**7 Which of these products contributes most to ozone layer damage?**

**A)** Aerosol spray cans.
**B)** Furniture made with foam.
**C)** Car air conditioners.
**D)** None of the above contributes.

**8 When you buy a hamburger and soft drink from a fast food outlet, the most environmentally destructive thing on your tray is:**

**A)** The burger wrapping.
**B)** The plastic cup.
**C)** The hamburger patty.
**D)** The plastic straw.

**9 Phosphate-free laundry detergents are better for the environment because:**

**A)** They don't promote the growth of algae.
**B)** They're less toxic to fish and other marine life.
**C)** They're more biodegradable.
**D)** All of the above.

**10 Why is the clearing of tropical rainforest a cause for concern?**

**A)** It contributes to the greenhouse effect.
**B)** It contributes to soil erosion and land degradation.
**C)** It reduces the Earth's biological diversity.
**D)** All of the above.

**11 Which of the following consumer actions would best help slow down global warming?**

**A)** Recycling cans and bottles.
**B)** Joining a car pool or using public transport.
**C)** Not buying aerosol cans.
**D)** Buying unbleached toilet paper.

**Why are phosphate-free laundry detergents considered to be beneficial for our waterways? See question 9.**

**7 C) Car air conditioners.**
Leaks from car air conditioners are one of the two biggest uncontrolled sources of chlorofluorocarbons (CFCs), the major class of ozone-depleting chemicals. (The other source is commercial refrigeration units.) Car air conditioners leak a lot, so it's important to have them regularly maintained to detect leaks early. Make sure your service centre uses a CFC recovery/recycling unit. Running the air conditioner for at least 10 minutes a week will also help, by preventing the seals drying out.

Australian car manufacturers have agreed to fit all new cars with air conditioners that use a CFC replacement, HFC 134a, by the end of 1994, and have begun to fit them already. After that it's likely they'll be legally obliged to do so. Owners of existing cars will probably have to have their air conditioning units modified to run on HFC 134a in the future, as eventually CFCs will be unavailable. Such modification can be done now, and will become more widely available as more new cars are fitted to run on the new refrigerant. Another alternative for existing car air conditioners is converting to use a blend of refrigerants which contains substances much less ozone-depleting than CFCs.

Domestic fridges and some foam-padded furniture use CFCs, but are much smaller sources. CFCs were used as propellants, but their use in virtually all aerosols has been banned in Australia since 1989.

**8 C) The hamburger patty.**
The debate over the environmental correctness of beef is heated at the moment and the answers not fully resolved. While there is nothing inherently harmful in rearing livestock, there are many arguments against the large part it plays in Western diets, including some powerful environmental ones.

It's possible to raise too many livestock and have too many in the one place. Overgrazing places a lot of pressure on the land, resulting in soil erosion and other forms of degradation. Clearing land to create grazing pastures can also damage soil quality and destroys the local ecosystem — when this land is densely vegetated, such as rainforest, it can have global implications (see the answer to question 10).

Raising livestock can also be seen as wasting resources. It takes much more energy and water to produce a serving of meat than to produce grains or vegetables supplying the same number of kilojoules, and places a much greater load on the environment. This is particularly true of modern, intensive beef-rearing practices, where cattle are fed with grain and other specially grown feed. Only around 2% of the local beef industry currently uses feed-lots but in the US, where it is much more common, 157 million tonnes of cereal, legumes and vegetable protein suitable for human consumption are fed to livestock each year to produce just 28 million tonnes of beef.

All this means our beef-eating lifestyle is a much bigger threat to the environment than the packaging and waste from fast-food restaurants.

**9 A) They don't promote the growth of algae.**
Phosphates are biodegradable and not particularly toxic to fish. However, the phosphorus in them is a plant nutrient, so a high level in lakes and waterways is one of the key factors triggering the overgrowth of algae. When this occurs the algae use up most of the oxygen in the water which is essential to other forms of aquatic life. In large numbers algae make the water unfit for us to drink or wash in, dangerous to animals and destructive of other marine life; some are also toxic in themselves. In Australia blue-green algae are particularly notorious in this context.

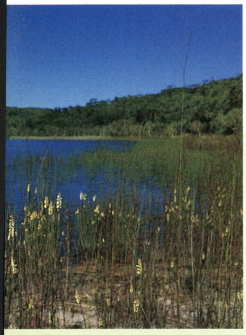
Phosphorus from detergents, along with that from human sewage, gets into waterways from sewage treatment works, many of which can't adequately remove it. The ingredients used in phosphate-free detergents in place of phosphates may have their own environmental problems, but our sewage treatment plants may be able to remove some of them, such as zeolites, more effectively. However, to cut a long story short, it is not yet clear that all phosphate-free detergents have an environmental advantage. Other things you can do to reduce the impact of detergents on the environment is measure out the correct dose for your load, and only wash when you have a full load.

**10 D) All of the above.**
Over the last 80 years, half the world's tropical rainforest has disappeared, most of it since 1960. Deforestation is still occurring today at the astonishing rate of 150 000 square kilometres a year. Since plants remove $CO_2$ from the air, deforestation contributes to the greenhouse effect. When forests are cleared by burning the contribution is greater, as combustion releases the enormous amount of carbon stored in the trees. An estimated 20% of current $CO_2$ emissions comes from the burning of tropical rainforests.

When forests are cleared, the soil quite quickly loses its richness or is eroded. On steep terrain, the removal of tree cover gives rise to floods and landslides.

**12 Paper grocery bags are environmentally preferable to plastic bags because:**

**A)** They're recyclable.
**B)** They're biodegradable.
**C)** They're made from a renewable resource (trees).
**D)** None of the above.



Tropical rainforests are extremely dense vegetation, supporting complex ecosystems, so another great cost of deforestation is the extinction of the vast and diverse range of lifeforms the forests support. It's estimated that half the world's species, many of them as yet unidentified, live in moist tropical rainforests. If the current rate of rainforest loss continues, one million or more species will become extinct by the end of the century. This is not only a tragedy in its own right: the vast biological riches rainforests contain have the potential to provide new and valuable foods and new drugs and medicines. Half the prescriptions dispensed in the world today originated from wild organisms.

**11 B) Joining a car pool or using public transport.**

Cars are responsible for nearly one fifth of our energy-related emissions of $CO_2$, the leading greenhouse gas, so using your car less will help. Recycling can involve some energy savings, but they are not as significant. While CFCs *are* greenhouse gases (as well as ozone-depleting substances), virtually no aerosols sold in Australia contain CFCs these days.

**12 D) None of the above.**

Under current conditions, paper bags have no discernible environmental advantage over plastic bags. Both are technically recyclable: what counts is if they actually *are* recycled — and most bags end up in landfills. While paper readily degrades in the open air, in the dry, airless conditions in many landfills it could take decades. The best option is one not mentioned: reusable bags — string, hessian, cotton, or your grotty old haversack.

**13 Throwing out garbage is an environmental problem because:**

**A)** It wastes energy and raw materials.
**B)** We're running out of landfill space in the cities.
**C)** Landfill can pollute groundwater.
**D)** All of the above.

**14 Which kind of milk container is least detrimental to the environment?**

**A)** 2 litre HDPE plastic bottle.
**B)** Reusable 1 litre glass bottle.
**C)** Paperboard 1 litre carton.
**D)** It is not clear.

**13 D) All of the above.**

Australia, like most of the western world, is suffering from too much garbage and not enough landfill space, especially in urban areas. Every item purchased and discarded unnecessarily — from excess packaging to unnecessary disposables to appliances with a short lifespan — represents wasted energy and raw materials. And while modern landfill designs minimise the risk of groundwater pollution, some older landfills still pose a pollution threat.

**14 D) It is not clear.**

Which milk container is best from an environmental point of view isn't clear-cut at all. Each of the three options has its pros and cons, but as a convincing lifecycle analysis hasn't been done, it's not possible to say how they pan out overall. For example:

- HDPE bottles are very energy-efficient to make and are lightweight, so more energy-efficient than glass to transport. They can be reprocessed into non-food containers, but as this is not happening on a wide scale many end up as non-degradable waste.
- Reusable glass bottles result in less waste, but are relatively energy-intensive to make. They're much heavier than other containers, so more energy is used to distribute them and collect and transport the empties. Reuse consumes less energy than making a new bottle, but a British study found they need to be reused at least 10 times before they're comparable with paperboard cartons and plastic bottles for overall energy-efficiency.
- Paperboard cartons are lightweight but moderately energy-intensive to make, and can be reprocessed to minimise waste.

Which is best also depends on the circumstances. For example, when milk was mostly home-delivered, the majority of bottles would have been returned and reused many times. But without this sort of locally based system, it's unlikely they would actually be reused enough times to be the most energy-efficient alternative. If you live in a remote area, a long way from a dairy and where landfill space is not a problem, they wouldn't be a good idea at all. The best option in that situation would probably be longlife milk in paperboard bricks. These are lightweight and don't need to be refrigerated during transport and storage, so would result in energy savings with every litre of milk.

**15 Which of the following claims most clearly indicates the environmental advantages of a product?**

**A)** Ozone-friendly.
**B)** Carton is recyclable and contains at least 80% recycled materials. Participation in recycling schemes reduces waste.
**C)** Pollution-free.
**D)** This cleaner is non-toxic, biodegradable and has no petrochemicals.

**15 B) Carton is recyclable and contains at least 80% recycled material. Participation in recycling schemes reduces waste.**

This claim is specific enough for ordinary consumers to see exactly what its environmental advantages are. Also, if the claim is made on a cardboard carton, the material is actually being recycled on a wide scale. The others are not specific enough, nor adequately explained. For example, if a product contains fewer CFCs than it used to or than similar products, it would be better to spell this out than use the general claim 'ozone-friendly'. 'Pollution-free' is also too sweeping a claim; it needs more information to support or explain its environmental advantage. A list of things a product is not or doesn't contain, such as 'no petrochemicals' doesn't tell the shopper how the product differs from the one next to it on the shelf, or why there is an advantage in it not having those characteristics or ingredients. ❑

# elementary asthma management

*"You mentioned your name as if I should recognise it, but I assure you that, beyond the obvious facts that you are a bachelor, a solicitor, a Freemason, and an asthmatic, I know nothing whatever about you." — Sherlock Holmes*

IT WAS OBVIOUS really. Even Doctor Watson spotted the untidy clothes, the sheaf of legal papers, the watch-charm and, of course, the fellow's breathing. Asthma is a common respiratory ailment throughout the world but particularly so in Australia, where it affects around 8%–9% of the population, nearly one and a half million people.

It also seems to be getting worse both in the numbers of people with asthma and the severity with which people suffer the disease. For many years the asthma mortality rate climbed steadily both here and overseas, although it's possible this was partly a result of more accurate diagnosis. Yet the number of people dying of asthma in Australia decreased in just two years from 964 in 1989 to 750 in 1991.

The Asthma Foundation of NSW believes this is a result of improved asthma management. Its chief executive officer Ron Brittain told us the National Asthma Campaign, which started three years ago, has raised awareness of the need for proper asthma management among doctors, pharmacists and asthmatics themselves. "Where asthma is properly treated and managed, the patient almost invariably survives," he said.

### What is asthma?

Our lungs are a bit like an inside-out, upside-down tree. The trachea (windpipe) goes down to the lungs, where it splits into two branches (called bronchi), one to each lung. The bronchi split into more and more branches (bronchioles), eventually ending in small sacs called alveoli (we have around 300 million of them). The walls of the alveoli are extremely thin and contain a network of tiny blood vessels (capillaries). Through these thin walls oxygen passes from the air in the alveoli into the blood, and carbon dioxide from the blood into the air in the alveoli to be breathed out.

Normally air flows in and out with the greatest of ease. During an asthma attack, the tiny muscles surrounding the tubes contract, the inner surface gets swollen and excess mucus forms. The combined effect of all this is to substantially reduce the internal diameter of the airways and hence the amount of air that can pass through them.

Inhaling becomes a little difficult but exhaling is the real problem. When breathing out normally, the chest muscles tighten to help squeeze the air out. But in an asthmatic, this squeezing only narrows the airways further, making it more difficult to breathe out. This also causes the wheeze that is often associated with an attack.

Most of the puffers asthmatics carry around with them contain a bronchodilator, which relieves the initial muscle contraction that brought the attack on.

While wheezing (breathing out with difficulty and making a high-pitched squeaking noise) is the main symptom of asthma, it can be caused by other conditions as well. Your doctor will be able to perform a series of tests to diagnose it correctly.

### What causes it?

While it's not clear exactly what brings on an attack, there seem to be two main causes. One is a straight allergic reaction where the lining of the lungs over-reacts to an air-borne allergen (such as pollens, moulds, pet hair or dust). The other is a condition called bronchial hyper-reactivity, where the airways become highly sensitive and a response is triggered by

any changes in the air, including changes in temperature. A prime example is an exercise-induced attack.

The former is called extrinsic asthma because the attack is brought on by factors outside the body, while the latter is known as intrinsic because factors within the body are predisposing you to an attack. The two causes are not mutually exclusive. Most asthma cases involve allergies, but exposure to allergens can increase the sensitivity of your airways and make you more susceptible to an intrinsic type of attack.

Sensitivity can also be increased by stress, chest infections (including common colds), certain foods and drugs (particularly aspirin and others used to treat heart disease, high blood pressure, arthritis and period pain) and constant exposure to various irritants at work (such as chemicals or dust) or elsewhere (cigarette smoke and pollution). It can be decreased with the use of certain drugs and avoiding the things that increase sensitivity.

Over half the asthmatics in Australia have very mild asthma. Most of the time it causes them no trouble at all and is brought on only after a cold or when particular allergens are around. Severe asthma involves wheezing frequently during the day, frequent sleep disturbances and a good chance of being admitted to hospital at some time. It affects nearly 5% of asthmatics. Around 1% have very severe asthma which involves disabling symptoms every day and frequent hospital admissions.

### Why do I have asthma?

Asthma is not infectious. Heredity and environment both play a big part in the likelihood of you developing the disease. If a close relative has asthma, you have a much greater chance of developing the condition than the average person. If your parents suffer from other allergic diseases (hay fever, eczema, etc) there is a good chance you too will be allergic to something and this could well manifest itself as asthma even though no-one else in your family suffers from the disease.

It is suspected there is a gene (and scientists believe they are close to identifying it) that predisposes you to asthma or other allergic diseases, but environmental factors (childhood viruses, passive smoking, etc) determine exactly what condition develops.

The disease is more common in children than adults. If a child has fairly mild asthma there is a good chance it will get better during the teenage years and he or she will be free of symptoms by the age of 21. Children with more troublesome asthma have a lesser chance (20%) of shrugging off the disease in adulthood, and there is also a significant number of adults who develop the disease despite showing no childhood symptoms.

Often when asthma develops in adulthood it is not an allergic response and the symptoms are more severe and long-lasting than in people who have had asthma since childhood. This form of the disease is pure intrinsic asthma.

### Getting it under control

Asthma management is as simple as monitoring your condition and acting appropriately. The Asthma Foundation of NSW offers two simple rules of thumb for asthma sufferers:

- If you need to use a bronchodilator more than twice a week, you have unstable asthma. You should go to a doctor and ask to be put on an asthma management plan.
- If you need to be on asthma medication every day, you should also be measuring your lung function (how hard you can blow out) every day with a peak flow meter.

There are two types of asthma medication. A bronchodilator treats the immediate symptoms of asthma but has no long-term effect. Preventive medication has no immediate effect but reduces the sensitivity of your airways and as a result the frequency and severity of attacks. Common preventive medications are corticosteroids or sodium cromoglycate. See *Drugs and devices* overleaf for more information on these drugs and their side-effects.

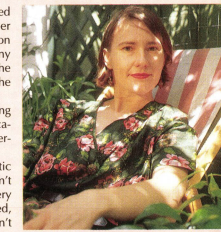
Many asthmatics use only their bronchodilator as a treatment, but this has no lasting effect on their condition and they risk a serious attack if they don't start preventive treatment. A Canadian study published last year found a link between long-term use of certain bronchodilators and an increased risk of asthma-related deaths and near deaths. The reason for the link isn't clear (the patient could become desensitised to the drug or just complacent about the seriousness of the condition). While the finding reinforces the need to use preventive medication if you are becoming over-reliant on your bronchodilator, it does not mean you should abandon your bronchodilator. It is still the most effective treatment in an attack.

The National Health and Medical Research Council recently rejected a proposal that the bronchodilators currently available over the counter at pharmacies be restricted to prescription only. Supporters of the proposal said it would force asthmatics to go to a doctor and be properly treated. Opponents said asthmatics not currently going to a doctor might continue to avoid a doctor and put themselves at an even greater risk.

A peak flow meter is a fairly simple device that measures how hard you can blow. In many cases it can detect a certain amount of breathlessness before you actually start to feel it yourself.

If your lung function starts to decline

## THE SEARCH FOR THE PERFECT REMEDY



SHARON WEST only recently started taking preventive medicine for her asthma, but it has had a big effect on her lifestyle. "I don't have attacks any more and I used to get backaches from the wheezing but that's much better too," she said.

She admits readily she'd been using her puffer for too long as her only medication "but I didn't really fancy taking steroids".

She was first diagnosed as an asthmatic when she was 18 months old but it wasn't particularly severe. She had attacks every so often till she was 13, when it improved, and for the next 10 years or so she didn't need to treat the disease at all.

Around the age of 24, it got worse again and reached a point where she needed to use her puffer every day. She tried eliminating asthma triggers such as sulphur dioxide and yeast from her diet, which worked once but wasn't so effective when she tried again later. She also tried a homeopath and a herbalist but they had no real effect on her asthma. The switch to using preventive medicine is only a recent one but it seems to be working effectively.

you should increase your preventive medication. If it drops to 50% of your best possible figure, seek immediate medical help.

Another important preventive step is avoiding asthma triggers. If you're allergic to the house dust mite, keep your house as dust-free as possible, for example by replacing dust traps such as carpets and curtains with hard floorings and blinds, which can be washed regularly to keep down the dust. Keep an eye out for additives in your food that may cause a reaction (such as sulphur dioxide or MSG). If you're allergic to mould, try to avoid dampness in your house. And keep away from cigarette smoke. *The enemy within* in the November 1992 issue of CHOICE has more specific information on allergies and how to cope with them.

While it is known some areas of the country have a higher incidence of asthma than others, moving should not be considered as an alternative to proper treatment. You may find you're allergic to something else. If you leave a coastal city to escape the dust mite (they're not as common inland), the pollen in a country town might affect you just as badly.

There are several 'alternative' treatments for asthma such as acupuncture, herbalism, yoga, etc. There is no proof that they do or don't work, but stress is known to exacerbate asthma in some people, so any treatment that helps you relax may well be beneficial. If you do find a treatment that works for you don't abandon your old medication. The benefits of medication are proven.

### Anticipating an attack

An asthma attack can develop very quickly with no prior warning, but in many cases there will be warning signs: general breathlessness and an increased need to use a bronchodilator are common. It is much easier to stop these symptoms from developing into a full-blown attack than it is to treat an attack once it occurs.

You are most susceptible to an attack in the early hours of the morning (no-one knows why), so if your lung function starts to decline during the day, seek help then rather than later at night when it's not always so easy to get.

Regular use of a peak flow meter is one way to monitor your condition. You may not notice a gradual decline in lung function but the peak flow meter should be able to pick it up. One problem is they can't be used reliably on children under six years old. If you have an asthmatic child, there are a few indications you can look for that might indicate an attack is on the way:

- Does your child have a persistent cough?
- Does your child wake up in the night coughing and wheezing?
- Is your child tired in the morning?
- Does wheezing or shortness of breath limit your child's activities?
- Does your child have to use a bronchodilator frequently?

The most common way to treat an asthma attack is with a bronchodilator. These usually come in the form of a puffer-type inhaler but they can be difficult for young children and elderly people to use. There are alternatives, such as the spacer (see *Drugs and devices* below), which is easier to use but quite large.

All asthmatics should carry an asthma action plan card (developed by the National Asthma Campaign and available from your doctor). It contains basic treatment information and peak flow measurements the patient should keep an eye out for as an indicator of an impending attack. Importantly, in the event of a serious attack, it also contains the patient's name along with their doctor's name and contact number.

### Drugs and devices

The most common bronchodilators are beta-agonists (such as **Alupent, Berotec, Bricanyl, Respolin** and **Ventolin**), which relax the bronchial muscles. Because they are related to adrenalin, their side-effects can include increased heart rate and sleeplessness, but the effects are usually slight.

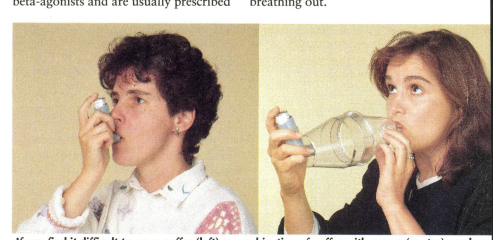
Other bronchodilators include atropines (like **Atrovent**) and theophyllines (such as **Brondecon, Cardophyllin, Choledyl, Elixophyllin, Nuelin, Quibron, Somophyllin** and **Theo-Dur**). They also relax the bronchial muscles but work in slightly different ways from beta-agonists and are usually prescribed in addition to rather than instead of them. The side-effects of atropines are quite mild (dry throat and mouth) but theophyllines can be much worse — nausea and vomiting are not uncommon.

In serious attacks oral steroids are sometimes used for their anti-inflammatory properties but they do have side-effects if used for any period of time, including a decreased resistance to infection, indigestion and facial puffiness.

Preventive medication usually comes in the form of inhaled corticosteroids (like **Aldecin, Becloforte, Becotide** and **Pulmicort**) or sodium cromoglycate (**Intal**). They are both anti-inflammatory drugs and help reduce the sensitivity of the lungs to triggers. Because inhaled steroids go straight to the place where they need to act, the doses are much smaller than when delivered orally and as such the side-effects much less — the worst is generally a slightly sore throat or a fungal infection in the mouth, but this is easily treated and can be prevented by rinsing the mouth out after each dose. Sodium cromoglycate has very few side-effects.

Most inhaled medication is delivered to the lungs via a puffer. These contain a CFC (chlorofluorocarbon) propellant that is activated by pressing the canister down inside a holder, thus propelling the active ingredient into the mouth. They need to be used correctly to be effective — a recent English study found 52% weren't being used properly. There are three important steps to remember:

- Hold the puffer vertically and shake it vigorously before use.
- Slowly begin to breathe in before pressing the canister down, then continue breathing in from the puffer evenly and deeply.
- Hold your breath for about 10 seconds or as long as is comfortable before breathing out.



**If you find it difficult to use a puffer (left), a combination of puffer with spacer (centre) needs less precise co-ordination. Another alternative is a device like the Turbuhaler (right), which doesn't use a propellant but simply releases a dose of powder into the mouth and airways.**

If you're experiencing side-effects such as a sore throat (particularly from inhaled steroids) or having difficulty co-ordinating the pressing of the puffer and breathing in, a spacer (such as **Breath-A-Tech, Fison Air, Nebuhaler** and **Volumatic**) is an alternative. It is a large plastic tube attached to the mouthpiece of the puffer. You breathe in after you press the puffer so no co-ordination is required, and less spray is deposited in the mouth and throat so side-effects are also reduced.

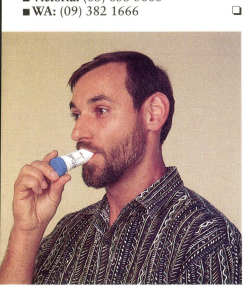
Alternative devices such as the **Rotahaler** and **Turbuhaler** don't contain a CFC propellant. They work on similar principles — you turn the base to release a dose of powder inside the device, place it to your mouth and breathe in. The difference is you have to place a capsule in the Rotahaler whereas the Turbuhaler has a number of doses built in. You must take care with both to keep the mouthpiece clean.

If you're planning to get pregnant, consult your doctor about your asthma medication. While there is merit in avoiding all drugs in pregnancy, a serious asthma attack could well be more damaging to an unborn child than the effects of medication.

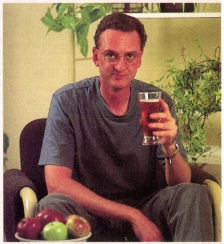
### *Where to get help*

Your doctor or pharmacist should be able to answer simple questions about your asthma and treatment. There are also Asthma Foundations in every state and the Northern Territory which can provide more general information and advice.

- **NSW (including ACT):** (02) 906 3233
- **NT:** (089) 22 8817
- **Queensland:** (07) 252 7677
- **SA:** (08) 223 7235
- **Tasmania:** (002) 23 7725
- **Victoria:** (03) 853 5666
- **WA:** (09) 382 1666 ❑



## THE CASE OF THE BELGIAN BEER



"I STARTED SNEEZING at five-second intervals. My eyes were running. I started wheezing. I was using the Ventolin every 15 seconds or so. I hailed a police car and mimed to them I couldn't breathe. They rushed me to a hospital where I had a mask put on with a nebuliser and also an injection of something."

Luckily for Michael Esler, this is the only time his asthma has forced him to hospital, and prompt treatment meant he could leave the hospital a couple of hours after the attack. The incident occurred while he was travelling in Belgium and was a straight allergic reaction triggered by the yeasty sediment in a beer brewed in the bottle.

"I can usually recognise the symptoms," he said. "If I'm not sure of what I'm eating I try out a little of it. If I get itching in the mouth or nose, I know to avoid it."

Michael rarely wheezes. It is more often "a tight feeling in the chest and occasional cough" but it is severe enough to use a bronchodilator and corticosteroids twice a day.

As a child he was virtually untroubled by asthma. He had an attack when he was nine or ten but virtually nothing until the end of high school. At university, he used a bronchodilator "on demand but not frequently". But when he moved to Yarra Glen in Victoria a couple of years ago the condition took a turn for the worse. He eventually saw a couple of specialists and found he was allergic to moulds, a number of grasses and house dust mites, all of which were in abundance in his new home.

He had desensitisation injections against the dust mite and pollens and increased his doses of preventive medication, both of which helped, but it wasn't till he moved back to Albury that he showed a significant improvement. "I guess the silliest thing I've done is to smoke," he concludes.

## THE SECRET OF THE SIX STEPS

The National Asthma Campaign recommends the following six-step asthma management plan:

**1 Know how severe your asthma is.**
If you have experienced any asthma symptoms, see your doctor and get them properly diagnosed.

**2 Achieve your best lung function.**
This is when you have no symptoms. It may take a few weeks of medication to achieve this if you are currently below your best.

**3 Avoid trigger factors.**
Well known asthma triggers include house dust, pollens, animal fur, moulds, tobacco smoke, workplace fumes and dust, food preservatives and colourings.

**4 Stay at your best.**
If preventive medication is prescribed you should use it regularly (without overusing it) or it won't be effective.

**5 Know your action plan.**
Your doctor will tell you how to recognise when your asthma is getting worse, how to treat it and where to go for help in an emergency.

**6 Check your asthma regularly.**
As well as monitoring your condition yourself, you should also consult your doctor regularly, not just in emergencies.

CONSUMER IN LAW
SPECIAL

# To ban or not to ban?

*Who decides when a product should be banned or recalled — and why are some traders prosecuted, and not others?*

EVER WONDERED why some unsafe products are banned and others apparently ignored? And why one trader is prosecuted while another just gets a letter from the minister?

Periodically our Consumer Information Service gets calls from frustrated consumers (and traders) who *know* there's a product safety issue and can't understand why Consumer Affairs isn't interested.

Government departments can be difficult to deal with at the best of times despite their good work, so this article is intended to help you understand the philosophy and pressures which beset the keepers of product safety.

### Realities

While Consumer Affairs departments deal with every complaint in one way or another, the things which tend to send product safety wardens rushing for action stations are (not necessarily in order): widespread fraud, a string of victims, unconscionable or careless actions by a manufacturer who is also seen as a standard-setter, products which will hurt or endanger children, repeated offences, and blatant disregard for safety regulations.

The sorts of things *you're* likely to complain about, however, are the actions of a small trader, a misleading advertisement or a wrongful claim — and unfortunately, you won't always be satisfied, or even understand the department's response to your complaint. Even though each bureaucracy has a range of options for the way it can handle an offence, limited resources and politics can mean a vague reluctance to pursue

## WHO'S WHO

■ **Federal Bureau of Consumer Affairs**
A Commonwealth authority, the Bureau monitors and enforces compliance with product safety and information standards on a national scale. It can ban unsafe goods and monitors product recalls. It can enforce a recall of an unsafe product if it deems it necessary. It also chairs the CSCPAC meetings (see below).

■ **Commonwealth/State Consumer Products Advisory Committee (CSCPAC)**
This comprises representatives from the Commonwealth, all states and territories and New Zealand, and the Standards Associations of both countries.

CSCPAC votes on whether national action should be taken against products which are the subject of complaint, and makes recommendations to the federal minister if it feels action is appropriate.

■ **State departments of consumer affairs and offices of fair trading**
State Fair Trading Acts give state departments the ability to control small local operators and businesses.

Until this year state governments acted pretty much autonomously, placing their own bans and notifying the Federal Bureau of Consumer Affairs if they thought action should be taken nationally. Now, however, 'mutual recognition' — an agreement between the states to accept the regulations concerning products and services in other states — means individual states will only be able to ban something temporarily (12 months) while its executives try and persuade the other states and the Federal Bureau the ban should be permanent and national. If they are unsuccessful the interim ban runs out.

Mutual recognition is seen as one way of preventing the states from banning or restricting the sale of a product for political reasons — for example to protect a state's manufacturers. It also means that in future — because a proposed ban will have to be discussed and researched more thoroughly in order to justify it to a number of people before being applied — embarrassing and financially damaging stuff-ups like the following are less likely to occur:

■ A former minister for NSW Consumer Affairs in good faith banned as being exceedingly dangerous a toy gun which, when filled with water, fired ping-pong balls. The minister had been told by the department's tester that the muzzle velocity of the gun was extremely high — a message the unfortunate minister took to the people via television. In the meantime the defence department conducted its own tests and concluded the NSW tester had put a decimal point in the wrong place. The gun was harmless ... and the 60-day ban in NSW was allowed to quietly die.

matters which are less than sensational.

While a minister can override normal procedure (staff may be asked to drop what they're doing to investigate a matter of intense media interest, for example), there's not much point in addressing your complaint to the minister — unless you're getting the runaround. Generally speaking, it's the product safety and standards people you have to convince if you want something done about an unsafe product:

*"If it's a safety issue and they phone me, and they are convincing enough — I am very open-minded, I am not going to dismiss someone who says they have a genuine problem — I then would probably ask them to put it in writing; things like facts, and whatever evidence they have. I would probably devote limited resources to researching it in a very short concise manner to see whether it's worth going further. Everyone has a different perception of what a safety issue is... "* Bob Laughton, Product Safety Manager, NSW Consumer Affairs.

### Will it kill or injure someone?

Not everything you might consider unsafe can be banned. The legislation which gives Consumer Affairs its heady power over products is very specific. The guidelines are clear: will it *unexpectedly* kill someone. Or injure them — and if so, to what extent? Here lies the first potential for disagreement over the definition of safety.

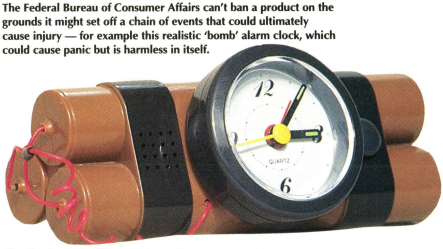
A freak one-off fatality may not require the same sort of control as a product which is likely to severely injure a number of people, so it also has to be asked, *how often* is this type of injury or death likely to occur? In determining the severity of a hazard Consumer Affairs staff are encouraged to think in terms of the worst possible scenario.

The Federal Bureau of Consumer Affairs looks after consumer matters on a wider scale than the states, recalling or banning products nationally if required (state departments have only local powers). It publishes a set of flexible guidelines which help define the seriousness of a hazard, and keep the assessments reasonably uniform across the country.

### Do people know it's potentially dangerous?

It's assumed consumers will take greater care when using a product they know to be potentially dangerous, as opposed to one which is clearly meant to be safe. Toys for young children, for example, could be expected not to contain any parts which are small enough to choke a baby or toddler, to be painted with non-toxic paint, and not to contain dangerous substances which could poison or burn if they leaked.

**The Federal Bureau of Consumer Affairs can't ban a product on the grounds it might set off a chain of events that could ultimately cause injury — for example this realistic 'bomb' alarm clock, which could cause panic but is harmless in.**




On the other hand, a kitchen utensil may have a number of tiny parts, or have extremely sharp edges — all of which spell danger to a toddler — but because it's designed to be used by a thinking adult and not a child it's not subject to regulation.

Consumer expectations play a big part in determining whether a product should be labelled in more detail, modified, or banned altogether. If it's impossible to modify a product and it's thought consumers would be unware of the danger, the Bureau can choose to ban it from sale — and in some cases will even ask the supplier to recall those already sold.

A classic case a few years ago involved some costume jewellery catering for the 'natural' look. A botanist wrote to the Bureau of Consumer Affairs concerned that a number of necklaces being sold were made from seeds which were in fact highly poisonous. Aware that some babies are fascinated by their mother's beads and will grab them to put them in their mouth while being held, Bureau officials decided the risk of poisoning to infants was too great to ignore. It located one of the suppliers (a community in the Northern Territory which was unaware of the danger it was creating) and asked it to stop production. At the same time it placed an import ban on the product to stop others coming into Australia from Papua New Guinea, and issued a ban under the Trade Practices Act on those already on the market.

### Who's got the power?

The second decision which needs to be made before a department will decide to 'go with' a complaint is whether it falls within its jurisdiction, and whether it should be dealt with locally or nationally. This is sometimes unkindly seen as 'passing the buck' but is nevertheless important.

When national action is required the Federal Bureau of Consumer Affairs can call on the Trade Practices Act, which deals in part with the prohibition of dangerous goods. However, the Act can only be invoked when a company is involved — sole traders are exempt. For this reason, the states have developed their own legislation (the Fair Trading Acts) which mirrors the Trade Practices Act, but also gives the states power to deal with backyard operators and small businesses.

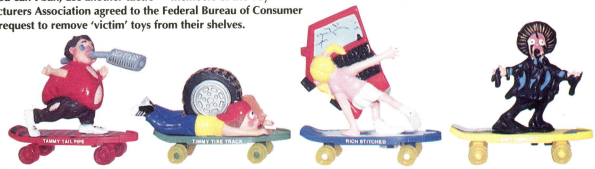
Various local authorities also deal with unsafe products — electrical product hazards are regulated by the Office of Energy, for instance; unsafe medical devices and pharmaceuticals, scheduled poisons and foodstuffs by the health department. One product safety officer said he thought Consumer Affairs 'plugged the hole' left by other agencies.

Each agency has to consider the wording of the legislation carefully before deciding to take action. Whereas the police can ban something which could 'disturb the public order' (the Shriken throwing star promoted to Kung Fu fans is a good example), state Consumer Affairs departments and the Federal Bureau tend to assess the design of a product:

*"Some of these items that can be used as weapons can only be banned under the Trade Practices Act if they hurt the user. Rifles are not banned. We have a lot of requests to ban war toys, but they're not inheritently unsafe ...*

*"We might ban a high-velocity item. We took the view with one high-velocity catapult that we did have the power. It could send a ball-bearing through the*

**When you can't ban, use another tactic — members of the Toy Manufacturers Association agreed to the Federal Bureau of Consumer Affairs' request to remove 'victim' toys from their shelves.**




*side of a steel filing cabinet!"* Gary Johnson, Assistant Secretary, Federal Bureau of Consumer Affairs.

### Unsafe design or carelessness?

Some safety issues are just too nebulous to regulate even when common sense might dictate otherwise:

*"The police rang not so long ago about one of those imitation plastic sticks of dynamite with an alarm clock and a coiled wire coming out of it. It was a novelty clock and couldn't injure anyone, but it was too realistic and was causing the odd panic. We couldn't ban it. The Act isn't intended to capture damage or injury that is too remote. If a product causes a chain of events where someone gets injured not by the product, but by falling down a set of stairs to get away from it, we can't take legal action..."* John Wunsch, Director of Product Safety, Federal Bureau of Consumer Affairs.

This sort of difficulty is now facing those who are looking at the safety of baby walkers. There's nothing actually wrong with baby walkers, but accident statistics show many babies are badly hurt when the walker tips down stairs or steps — most suffer head injuries as a result. This type of accident happens often. It's a product safety issue, but it's more related to a lack of supervision than design; many parents don't realise how fast their children can move in these things, and don't barricade stairways and stepped doorways. Even though the Trade Practices Act does not specify moral issues, the question of whether the level of supervision required for the safe use of this product is realistic still has to be answered.

### The sword of Damocles

*"We become aware of a situation, contact the supplier and say, 'Hey look, you may need to take some action.' They then proceed. Now that dealing, that investigation, there is no significant output because there's no notice, no nothing ... just our presence."* Bob Laughton, Product Safety Manager, NSW Consumer Affairs.

When Consumer Affairs personnel know there's a problem with a product but can't do anything because they're hamstrung by the limitations of the current legislation or financial constraints, a quiet word to the supplier is sometimes all that's needed to fix it. Many companies are willing to oblige. After all, they argue, they are consumers too. The approach by the department, however, carries a clear message: if the manufacturer doesn't do something, the minister *might*.

This happened when 'victim' toys appeared on the market some years ago, outraging some sections of the community. The Federal Bureau worked hard to have them banned, despite knowing that the legislation would not support it if they couldn't prove the toys could be harmful. A committee set up to resolve whether the toys could cause psychological harm was "split down the middle". Some argued the toys would desensitise children to the problems of victims; others said "bunkum". Eventually the Bureau — which couldn't get together enough credible opinion to ban the toys under the Trade Practices Act, but which felt it should do something — pressured the Toy Manufacturers Association into asking its members to withdraw the stock from their shelves. Although this didn't stop retailers who weren't members from selling the toys, the problem was effectively solved because all the importers were in fact members.

### Tigers with toothache?

*"Product safety depends a bit on the minister. Say we were very energetic and zealous in the way we tried to administer these provisions, it could be that our minister would not support us..."*

Generally speaking, senior bureaucrats everywhere are uneasy with 'put up or shut up' situations. It takes money, political courage and independence to continually confront wrongdoers — especially if they're influencial and wealthy, and can afford good legal representation.

Consumer Affairs departments are well down the list as far as political prestige goes, and only exist because consumer groups have fought for government recognition of consumer rights. Staff say they could lose what power they have if they're seen to be "too terrier-like". Too much assertion, and industry lobby groups may start arguing for things such as business impact studies to be considered before the department is allowed to take any serious action.

'Limited resources' is always a good catchcry for no action — for any organisation. Unfortunately, this means prosecutions become less likely as bureaucrats argue the expense of collecting evidence for a court case is unacceptable in terms of its outcome. So even when a trader has clearly committed an offence, department staff are urged to consider a variety of factors before referring it to the lawyers: the probability of success, previous outcomes, the likely penalty (a light fine is not worth the department's money and effort), forfeiture of goods (perhaps seized as unsafe), compensation and cost, and the attitude of the courts in similar matters.

One departmental operations manual also urges staff to be sensitive to the effect the court action might have on the livelihood of a current holder of a trade licence, and the possible stigma that might cling and prevent them being licensed in future.

*"The position is really no different than in the case of the police, who do not necessarily prosecute for every offence, or even report every offence."*

Given these arguments, state Consumer Affairs, Fair Trading Offices and the Federal Bureau have developed other ways of responding to a complaint about an unsafe product.

Where a product is considered essential to 'daily' safety it's likely an Australian Standard has already been developed by industry, government and consumer groups. If Consumer Affairs

keeps getting complaints about inferior brands the Bureau considers making the Standard mandatory as the first line of control. This has been done for a number of items: bike helmets, buoyancy vests and child restraints in cars are examples. Pool fencing was tried but committee members are still struggling over the 'moral' issue of mandatory fencing vs parental supervision.

The lowest form of action is a **quiet chat** with the management during which Consumer Affairs points out what is required and sometimes offers to help. This is normally used when there's a new standard introduced, or the company is a new entrant to the market.

The investigator may also issue a **written warning**, depending on the offence. If the company ignores it the authority is then forced to put up or shut up at the next instance of non-compliance. But it has legal implications and is not issued lightly — for the 'cost' reasons above.

Occasionally, either for political reasons or shock value, the executive board might also receive a **letter from the Minister**. It might also have to supply a **written undertaking** to improve its future conduct.

### So who does go to court?

*"It only went to court after we had carried out a product recall and removed the items from sale, but inadvertently another lot of merchandise went out ..."* John Jukes, K-Mart public relations manager, on the $52 000 fine levied on Coles Myer for incorrect fire-resistance labelling of children's nightwear (see CHOICE, April 1993, *Consumer-in-Law*).

Consumer Affairs people agree on one thing: only serious matters should go to court, and the Bureau took K-Mart's repeated breach seriously: *"We warned them twice, and they promised to fix it. We checked, and they* [the incorrectly labelled goods] *were still there. That was just too much!"*

Evading the legislation and breaches of safety standards and banning orders which may put consumers at risk of death or injury are likely to have a very high priority for court action, whereas other breaches — even of some safety standards (such as some labelling offences) — may not expose consumers to a high risk and are not a high priority for court action.

### Conclusions

We had hoped to draw up a flowchart to show exactly how the lines of responsibility concerning product safety, recalls and bans are drawn, but found things aren't that simple — and it's handled differently from state to state. Even if you think you've discovered a product safety issue, Consumer Affairs departments might have a different opinion as to its seriousness or as to whether any of the relevant Acts covers it. On top of that you'll run into genuine financial constraints, decisions you may not understand the basis for, and sometimes moral considerations (for example whether it's a product or a high expectation of parental supervision that is at fault).

Community expectations can apply the ultimate pressure, which is why lobby groups can have more success — a group of people can claim to represent a community and are harder to ignore than an individual. They also find it easier to generate media interest — and ministers are very sensitive to this.

As long as we have split jurisdictions, fail to have a product safety law which makes it an offence to knowingly sell products that are considered unsafe, and have no vehicle like a pro-active product safety commission, nothing will change. Australian consumers need a product safety commission and national product safety legislation. However, although the present system is less than perfect it's better than no system at all. ❑

## WHEN IS A RECALL NOT A RECALL?

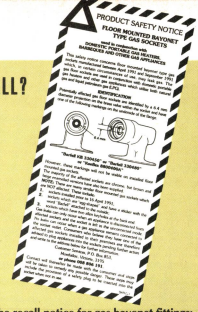
*"If we built a reputation of being very ruthless in this area of recall, what worries me is that with a change of government, product recall provisions will be repealed. If we got too pedantic I think there would be such a backlash ..."*

A RECALL doesn't necessarily mean you get your money back or a replacement. The manufacturer can supply any solution to the problem if the Bureau is satisfied with it. They must advertise the recall in a consumer-friendly way, and widely enough to satisfy the Bureau that consumers have had every chance of being notified.

Cases where the Bureau is criticised for apparent leniency to a manufacturer are not unknown. One concerned a recall of gas bayonet fittings to connect gas heaters and portable barbecues when it was found around 1% of them were faulty and leaked. The manufacturer would have been in financial difficulty had the order been forced so, in accordance with the provisions of the Trade Practices Act, the Bureau ordered the next supplier in line — the company that supplied the goods to consumers and trade — to take responsibility for the recall.

Although there was some discussion between the latter company's legal representatives and the Bureau, it says it exercised more discretion than it normally might because of this (some might say unfair) imposition.

The upshot was the recall notice was crammed into half the space recommended by the Bureau's guidelines, making the brand name barely readable (especially to elderly people who might have both diminished eyesight and a poorer sense of smell to detect any gas leak). The advert was called a 'Product Safety Notice' instead of the recommended 'Product Safety Recall Notice', and the plug which callers to a 008 number would receive to attach to the faulty bayonet was supplied with no chain and couldn't be permanently attached, so was likely to be lost over time. The Bureau had suggested adding a chain but hadn't pursued it, saying it would cost the company too much. However, from what the Bureau has told us it seems the actual costing was never discussed.


PRODUCT SAFETY NOTICE

FLOOR MOUNTED BAYONET TYPE GAS SOCKETS

The tameness the Bureau displayed in the face of the company's legal representatives may have had something to do with the fact that the company is owned by Pacific Dunlop — one of the largest corporations in Australasia (worth $5 billion, and the ninth largest company in Australia); the Bureau executive simply said he did not want a fight. A more senior executive, however, has said the Bureau has never been overawed by the size of a company or its legal representatives, and has taken Pacific Dunlop to court in the past for incorrectly labelling children's nightdresses.

**The recall notice for gas bayonet fittings: print so small you can hardly read the brand name, and its heading doesn't use the word 'recall'.**

FROM OUR LAB

# TINY TELLIES

*A pocket-sized, battery-run colour TV you can watch anywhere, any time. It sounds like the stuff of a 10-year-old's dreams. Has technology caught up with fantasy?*

FOR MOST PEOPLE, tiny handheld portable televisions are still pretty expensive toys. But as well as being a perfect gift for that special someone-who-has-everything, they are interesting as an example of how far technology has come. They might show the way of future developments in the audio-video field. We tested one model — the **REALISTIC PocketVision 220** — to see how it performs.

This colour TV is only slightly larger than a cigarette packet (in the picture below it's shown about 85% actual size), with a screen size of 52 mm. The screen is a flat liquid crystal display (LCD) — similar technology to that used for digital watch faces and calculator displays, but more sophisticated. LCDs are also being used for the screens of notebook computers.

Its controls are basic: a channel selector, volume, brightness and colour adjustors, and a VHF/UHF selector which doubles as the on/off switch.

It is powered by four AA-sized batteries, and can also be plugged into mains power and car batteries (via the cigarette lighter) with appropriate adaptors. (These adaptors aren't included in the price of the set but are available as an optional extra.) One set of AA batteries ran this TV for around three hours.

## SOUND AND VISION

The TV has its own telescopic aerial to aid reception, plus a connection socket for an outside aerial. In the Sydney metropolitan area where we tested, it achieved fair to good picture quality using its own aerial. In areas where signal strength was weaker the picture gradually lost colour and became 'snowy'.

We found the TV's reception was very sensitive to position, varying greatly from one room to another within a house, as well as from suburb to suburb. This is due to the type of aerial it comes with; reception improved greatly when the set was connected to an external aerial.

You can listen to the TV through its small speaker or earphones. Its sound quality through the speaker was fairly low.

## DATA

**REALISTIC PocketVision 220 LCD Colour Pocket TV PAL (B/G).**
**Dimensions:** 132 x 85 x 35 mm (aerial extends to 530 mm).
**Weight:** 330 g (including batteries).
**Price:** Around $250.
**Warranty:** One year parts and labour.
**Origin:** Japan
**Accessories:** Soft carry case.
**Optional accessories:** AC adaptor, car battery adaptor, audio-video cable adaptor, antenna adaptor.

The set has video and audio inputs, so it can be used as a monitor for a video camera. Its bigger screen and colour picture make it better than the monitor provided in most cameras, but while it's handy for playing back pictures it's unwieldy to use while recording.

### Station to station

The channel selector on this TV is very much like automatic scanners on radios. There's no way of locking in the channels — each time you swap stations you press a button and the TV scans till it finds the next one. When it's turned off the dial goes back to the bottom of the scale; when it's turned on it scans up the scale to the first station.

The set is easy to use. Only the colour control can be a little difficult — to change it you have to push on a little shaft and rotate it, but it doesn't stick out far enough to get a good grip on it.

### Conclusion

As a display of what is achievable with current technology, this TV is very impressive. However, the difficulty in getting a consistently decent picture limits its value as a take-anywhere source of entertainment. ❑

## MORE TINY TVs

While we only tested the **REALISTIC PocketVision 220**, there are other tiny TVs around:

- **REALISTIC PocketVision 812**, with a 70 mm screen and AM/FM radio, for around $350.
- Four **CITIZEN** models: **G-5526**, 55 mm screen, around $200; **G-5540**, 74 mm screen and 30 channel presets, around $300; **G-5535**, 74 mm screen, AM/FM radio and other features, around $300; **G-5545**, 99 mm screen with corded remote control and 30 channel presets, around $700.
- **SEIKO LVD-404**, with a 84 mm high-resolution screen, around $700. Sold via mail order/direct marketing and duty-free stores.
- **CASIO TV470**, 56 mm screen, around $250; **TV1450M**, 69 mm screen, around $400.
- **PHILIPS 3LCRAD**, 76 mm screen, around $950.
- **SHARP 6MIOS**, 142 mm screen with corded remote control, around $2000 (Sharp tells us the majority of its sales of this model are duty-free, for around $1400).
- **SONY** only has a **VIDEO WALKMAN** — a combined video recorder and TV with a 102 mm screen for around $2300.

# The 8th CHOICE Subscriber Draw

## For new CHOICE subscriptions and renewals received April 1 to June 30, 1993.

Subscriber draws are now held quarterly and on July 1 we'll be holding our eighth. The lucky winner will be able to choose any two products from the following tests published October 1992 to December 1992.

- ☐ Notebook computers (December 1992)
- ☐ Handheld blenders (November 1992)
- ☐ Cordless phones (December 1992)
- ☐ Air conditioners (November 1992)
- ☐ Answering machines (October 1992)

These are products we bought for testing, so you won't be the first to turn them on or set them up. But we'll cover any service problems with a CHOICE warranty that'll match the manufacturers' — just as if you'd bought them new.

All new CHOICE subscriptions and renewals received from members and personal subscribers (including donors of gift subscriptions) by June 30 will go into the draw, unless of course you indicate you don't want to be included.

(If you're not due to renew your subscription during the period, don't worry, we'll be holding other draws during the year — your renewal notice will have the details. And if you're on a two-year subscription you'll be entered on your first anniversary as well as when you renew again.)

***Winning for real***

"I read the letter saying I'd won a prize and I just thought it was one of those letters where you've got to do a hundred things before you actually win anything. But I read it again and there didn't seem to be a catch and it had this lady's name on the bottom so I rang her up and said, 'Are you for real?' "

Melva Smith of Mt Duneed, Victoria, was assured by our managing editor Cathy Gray that we were for real and she was the winner of our sixth subscriber draw. The sixth draw offered a choice of three products as the prize — Melva picked a **SAMSUNG** microwave, a **KELVINATOR** fridge and a **HOOVER** dryer from a list of products we had recently tested.

She's been subscribing for 16 years and found the magazine particularly useful in her first few years of married life. "Whenever we wanted to buy anything we were always able to find it in a back issue of CHOICE," she said. "It's like a little library."

✍ Use the order form overleaf ☞

## CONDITIONS OF ENTRY

1. The winner will be drawn from new subscriptions and renewals from personal subscribers (including members and donors of gift subscriptions) received April 1 to June 30, 1993. If you opt for a 2-year subscription, you'll be entered on your first anniversary as well as when you actually renew or subscribe.
2. Information on how to enter and prizes form part of these conditions of entry.
3. Employees, and their immediate families, of the Australian Consumers' Association and its associated companies and agencies are ineligible to enter.
4. Entrants must be residents of Australia.
5. Applications are subject to a verification check and judge's decision is final. No correspondence will be entered into.
6. The prizes will be delivered free anywhere within Australia.
7. Prizes cannot be taken as cash.
8. South Australian residents may enter the draw by completing the form and posting to:
   Reply Paid No. 13, ACA, 57 Carrington Road, Marrickville NSW 2204, without subscribing to the magazine. Only one entry per person is permissible through this method.
9. Last date for receipt of entries to the draw is June 30, 1993. No responsibility accepted for lost, late or misdirected mail.
10. The draw will be conducted at the office of the Consumers' Association at 10 am on July 1, 1993.
11. The winner will be notified by letter and published in the October 1993 issue of CHOICE magazine.
12. The promoter is Australian Consumers' Association, 57 Carrington Road, Marrickville NSW 2204. NSW Permit No. TC93/0670, VIC Raffles & Bingo Permits Board Permit No. 93/482 issued on 24/2/93, ACT Permit No. TP93/0326 issued under the Lotteries Ordinance, NT No. NT93/0241.

# ORDER FORM

Send to:
Australian Consumers' Association
57 Carrington Road, Marrickville 2204
Please allow four weeks for delivery.

Phone: Subscriptions (02) 558 8088
General: (02) 558 0099
Fax: (02) 558 9341

| | Qty self | | Qty gift | | AMOUNT |
|---|---|---|---|---|---|
| **CHOICE** 12 issues per year — monthly | | PERSONAL | | @ $48 | |
| | | INSTITUTION | | @ $63 | |
| **CONSUMING INTEREST** 4 issues per year — April, July, October, January | | PERSONAL | | @ $27 | |
| | | INSTITUTION | | @ $33 | |
| **TRAVEL** 4 issues per year — March, May, August, November | | PERSONAL | | @ $27 | |
| | | INSTITUTION | | @ $33 | |
| **BOX HOLDERS** (holds 24 issues) | | RED | | @ $12 | |
| | | GREEN | | | |
| | | BLUE | | | |
| **FOLDERS** (holds 12 issues) | | RED | | @ $12 | |
| | | BLACK | | | |
| | | BROWN | | | |
| | | | | TOTAL | |

To speed your order attach your CHOICE mailing label or write in your subscription number:

_____

Please tick

| | |
|---|---|
| CHEQUE | Payable to Australian Consumers' Association |
| MONEY ORDER | |
| BANKCARD | |
| MASTERCARD | Expiry date ____/____ |
| VISA | |

Card Number | | | | | | | | | | | | | | | | |

Name on card _____ Signature _____

Mr/Mrs/Miss/Ms _____
First name Last name

Address _____

_____ Postcode _____

Contact phone no. (___)_____ Include me in Subscriber Draw ☐ Yes ☐ No

**GIFT RECIPIENT DETAILS**

Mr/Mrs/Miss/Ms _____
First name Last name

Address _____

_____ Postcode _____

Gift card to read: To _____

From _____ Send gift renewal notice to me ☐ Yes ☐ No

IL 9304 INS

# CHOICE LINES

## Consumer Rights Advice

CHOICE operates consumer rights lines f people having problems with a faulty pr duct or a dispute with a service person. Th lines set out what your basic rights are ar what steps you can take to protect ther These lines are also available in four la guages other than English — Vietnames Arabic, Chinese and Turkish.

CHOICE Consumer Rights Advice: **0055 2001**
Advice in Vietnamese: .....**0055 2000**
Advice in Turkish: .....**0055 2000**
Advice in Chinese: .....**0055 2001**
Advice in Arabic: .....**0055 2001**

## Youth lines

A line specifically for young consumers, th 'Ripped-off' Line, outlines your shoppin rights as well as letting you know what yo can do if you run into problems with some thing you have bought.

Students can also call a resource line t find out where to get up-to-date informatio on the consumer movement and the en vironment. These two topics are the mos requested by students and teachers who rin our Consumer Information Service.

CHOICE 'Ripped-off' Line — Advice fo Young Consumers: **0055 2000**
CHOICE Student Resource Guide: **0055 2001**

## Product advice

A number of product lines also summarise what to look for when you are buying a particular product. Brand-name recommen dations aren't included, however — these remain exclusive to CHOICE subscribers.

CHOICE Washing Machine Advice: **0055 2001**
CHOICE Water Filter Advice: **0055 2001**
CHOICE Baby Products Advice: **0055 2001**
CHOICE Safer Domestic Pest Control Advice: **0055 2001**

## Other lines

A media 'hotline' provides immediate and accurate background information on con sumer issues being reported in the news media, while a 'suggestion line' gives you a chance to say what you would like to see tested or researched for publication in CHOICE.

CHOICE Media 'Hotline': **0055 2001**
CHOICE Suggestion Line: **0055 2001**

**Calls attract a rate of 55 cents per minute.**

# FROST-FREE FRIDGES: 350L TO 400L

*For once we can say it: all the models in this test were satisfactory — although there's still room for improvement in the area of energy efficiency.*

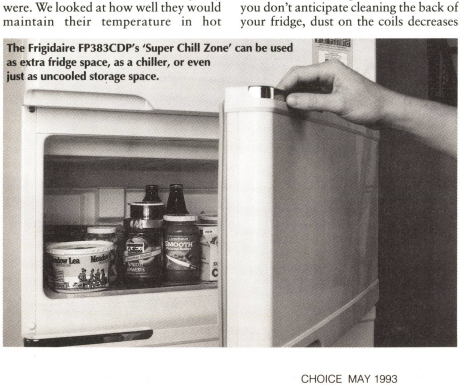
FOR OUR 30th fridge or freezer test since CHOICE started in 1960, we looked at nine 350 L to 400 L fridges, all frost-free. This size is ideal for families and for storing ample supplies of cool drinks in the summer, with plenty of room for meat and vegetables the whole year round. Two of the fridges (the **FISHER & PAYKEL N395BN** and **N369BN**) are 'upside-down' models, with a slightly larger than normal freezer placed underneath the fridge compartment, which is thus at a good access height. All but one of the fridges has two doors. The **FRIGIDAIRE FP383CDP** has a third, opening onto a 'Super Chill Zone' (see below). This can be used as extra refrigerator space, maybe for those items you want to use frequently such as milk — just opening a smaller, confined space saves warming up the whole fridge each time. Alternatively it can be used as a chiller, or even as uncooled storage space. You adjust the temperature to suit your use.

We put the fridges through our usual tests — energy consumption, freezing ability and insulation — in our thermolaboratory, using controlled temperatures. We also rated how easy they were to use and and measured how noisy they were. We looked at how well they would maintain their temperature in hot weather by monitoring the inside temperature while the outside lab was 43°C.

## WHAT TO LOOK FOR

While the fridges all passed our tests, some had features which could prove highly frustrating for some people. If you're buying a fridge, even one of the ones we recommend here, make sure you consider the following:

- A vital consideration is, no matter how super-efficient or thoughtfully designed, will it fit where you plan to put it? Check the dimensions in the table.
- How far do you have to open the door to remove shelves or storage trays, and can you move the door hinges to the other side if where you're putting the fridge means you can't open the door wide enough? See the table for this information on the models tested.
- Choose a fridge with a high energy rating (the more stars the better) for your pocket and for the planet. We measured the ones in this test as ranging from three stars to four — none of the fridges had the maximum six stars.
- Does it have a sealed surface at the back, making cleaning a doddle? Or does it have coils which gather dust? Even if you don't anticipate cleaning the back of your fridge, dust on the coils decreases the fridge's efficiency, so a sealed back is preferable. The **NORGE** and the two **KELVINATOR**s have coils, the others have a smooth exterior.
- Is it on rollers? Cleaning the back or moving to another position, or even removing a trapped object from the back, will be a lot easier with the help of wheels. Most of the models we tested have rollers, some at the back only, while the **SAMSUNG**s have feet only. See the table for a full list.
- How do the shelves feel? We noticed some were stiffer to move than others, but you can check this in the shop.
- What extra features does it have? For instance, features to choose between in fridges in this test include special shelves, Super Chill Zone, meat keeper, half shelves, bottle support and fast freeze. Check the table for details of individual models.



**The Frigidaire FP383CDP's 'Super Chill Zone' can be used as extra fridge space, as a chiller, or even just as uncooled storage space.**

## WHAT TO BUY

There's little difference in overall score between the fridges — in fact of the models we tested, the top and bottom overall scores were very close — 57% was the lowest, 63% the highest. The top-scoring **SAMSUNG SR-398** narrowly beats its closest rivals on price, while if you want an upside-down model the **FISHER & PAYKEL N369BN** is slightly cheaper — and slightly smaller — than its N395BN sibling.

Energy efficiency was in most cases better than claimed. All models passed the electrical safety tests and because of their size all proved good for storing a range of items including two-litre bottles, four-litre casks and tall wine bottles. All were within 3% of their claimed volume.

| | | |
|---|---|---|
| | **SAMSUNG** SR-398 | $930/$1129 |
| equal | **FISHER & PAYKEL** N395BN (U) | $1100/$1349 |
| | **FISHER & PAYKEL** N375TN | $985/$1199 |
| | **FISHER & PAYKEL** N369BN (U) | $1015/$1196 |
| | **SAMSUNG** SR-348 | $860/$1004 |
| | **KELVINATOR** N400V | $1095/$1309 |
| equal | **KELVINATOR** N351V | $965/$1179 |
| | **NORGE** PT38F | $995/$1100 |
| | **FRIGIDAIRE** FP383CDP | $980/$1199 |

Prices shown indicate the range found in nationwide checks in March 1993.
U Upside-down model — freezer below fridge compartment.

## PROFILES

Fridges are listed in rank order. Prices shown indicate the range found in nationwide checks in March 1993.

As all these models were large they were all easy to load and fit awkward-shaped containers into — all their ease of use scores were very close, ranging only from 73% to 77%; differences are mainly in performance.

**SAMSUNG SR-398**
*Price:* $930/$1129
Top scorer overall; best for energy efficiency and second best for freezing an additional load quickly.

**FISHER & PAYKEL N375TN**
*Price:* $985/$1199
The fastest at freezing an additional load. You can remove the shelves when the door is open only 90°, and the door hinges are reversible so the door can open either side.

**SAMSUNG SR-348**
*Price:* $860/$1004
Second best for energy efficiency, but one of the slowest to freeze an extra load.

**FISHER & PAYKEL N395BN**
*Price:* $1100/$1349
An upside-down model (freezer below fridge), so fresh food compartment is at a good access height, though the bottom freezer basket tends to fall out when you pull it forwards. You can remove the shelves when the door is open only 90°, and the door hinges are reversible so the door can open either side. Good insulation.

**FISHER & PAYKEL N369BN**
*Price:* $1015/$1196
An upside-down model (freezer below fridge), so fresh food compartment is at a good access height, though the bottom freezer basket tends to fall out when you pull it forwards. You can remove the shelves when the door is open only 90°, and the door hinges are reversible so the door can open either side. Best for insulation.

**KELVINATOR N400V**
*Price:* $1095/$1309
Quite good for freezing an extra load quickly, but one of the worst for both energy efficiency and insulation (only took 12 hours for the load in the freezer to reach –5°C). A freezer shelf support broke after only one day.

**KELVINATOR N351V**
*Price:* $965/$1179
One of the worst for energy efficiency.

**NORGE PT38F**
*Price:* $995/$1100
Among the worst for all three of the tests that make up our performance score: energy efficiency, freezing a load quickly and insulation. Technically the same model as the Admiral IT38F and Hoover B38TF, so the same results should apply to these models.

**FRIGIDAIRE FP383CDP**
*Price:* $980/$1199
The Super Chill Zone was regarded as an asset, but this model was the slowest at freezing an extra load, although quite good for energy efficiency.

# AT LAST: SIGNS OF CFC-FREE FRIDGES

IN OUR very first fridge test in 1965 CFCs (chlorofluorocarbons) didn't even get a mention. Now these common refrigerants which menace the ozone layer are very much in our minds. As well as being a refrigerant, CFCs are used in fridges' insulation.

Now, 29 fridge and freezer tests after our very first, we can give you a few details on some new-design models which are finally on the market. We've even tested one CFC-free model for Greenpeace for an energy rating. The fridge is made by a German company, DKK, and called 'Greenfreeze'. It uses the hydrocarbons propane and butane as refrigerants. While it doesn't do very well — it rates among the worst fridges (one star) for energy efficiency — it is among the pioneer products in this category as it shows it is possible to make a modern fridge work without CFCs. Its current design means the savings to the ozone layer are traded off against the greenhouse effect (because of its high energy use), but we expect to see improvements in future models which will bring energy savings too and hopefully make them a viable alternative to conventional fridges. It could be, for instance, that something as simple as doubling the thickness of the walls would improve the insulating capability and also the star rating.

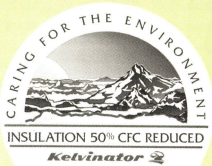
While other CFC-free fridges are also appearing, some of these use HCFC (hydrochlorofluorocarbon) and HFC (hydrofluorocarbon) gases. Greenpeace says, "HCFCs are now listed by the Montreal Protocol as controlled substances because they deplete the ozone layer ... HFCs are potent greenhouse gases ... and as such do not have a big future." So although HCFCs deplete the ozone layer less than CFCs, neither of these replacements is regarded by environmental groups as acceptable in the long term.

Email has released two CFC-free fridges, one under the Westinghouse brand name and one as a Kelvinator. The refrigerant in both is HFC 134a and the insulation incorporates polyurethane using HCFC 141b.

Email says it will extend the CFC-free technology across its range so that by the end of 1994 its entire range will be CFC-free — as it will be required to be by law. We will be watching progress with great interest. The new models were launched in February and should be available in the shops. The details supplied by Email are:

■ Kelvinator C302V, a 300 L two-door top-mounted (freezer on top) cyclic defrost fridge/freezer with an estimated four-star energy rating.

■ Westinghouse BJ410G, a 410 L two-door bottom-mounted (fridge on top) frost-free fridge/freezer with an estimated 4 stars.




**Labels need to be more specific than this to be of any real value to consumers.**

Most of the nine fridges in this month's test claim a reduction in the use of CFCs, but without supporting information these statements are meaningless. Generally speaking, up to 50% of the CFC used in the insulation foam in fridges has been replaced by carbon dioxide. But when the statement '50% CFC reduced' stands alone the obvious question arises, "From what level?" The worst offender could reduce its CFC load by half and still be worse than one which started low and makes no claims about CFC reduction.

Several other things have changed since 1965, when we reported, "Refrigerators come in two basic types — compressor [type] which incorporates an electric motor and compressor ... There are also quite a number of 'absorption' refrigerators which have no motor but are operated by heat, which may be supplied by electricity, gas or kerosene." No doubt some of our older readers will remember those! Some of the younger ones will too if they use a fridge where there's no electricity.

It's surprising how expensive the fridges we bought then were. The prices ranged from £142 to £165, and as this was the period just before the switch to dollars, prices in the soon-to-be-introduced currency were included in brackets — helping to instill an idea of dollars and cents before the changeover. The prices of the fridges in this month's test are from around $900 to $1300; last year it took seven working days on average to earn enough to buy a 350 L fridge, in 1962 it took 57. We've also switched from Fahrenheit to Celsius, and now assess storage space with litre bottles as opposed to pints of milk.

# FROST-FREE FRIDGES: 350L TO 400L

| | 1 | | | | | | | | 2 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Brand/model (in rank order) | Manufacturer/ distributor | Origin | Price ($)* | Warranty | Usable volume (L) — fridge/freezer | Dimensions (cm) — H x W x D | | Shelves removable with door open 90° | Position of door hinges/reversible | No of shelves (fridge/freezer) | Rollers |
| | **SAMSUNG** SR-398 | Samsung | Korea | 930/1129 | 1 year *(A)* | 241/95 | 174 x 67 x 65 | | | right/no | 3/2 | 0 |
| equal | **FISHER & PAYKEL** N395BN **(U)** | Fisher & Paykel | Australia | 1100/1349 | 1 year *(B)* | 254/132 | 170 x 64 x 68 | | ✓ | right/yes | 4/3 *(D)* | 4 |
| | **FISHER & PAYKEL** N375TN | Fisher & Paykel | Australia | 985/1199 | 1 year *(B)* | 273/88 | 158 x 64 x 68 | | ✓ | right/yes | 4/2 | 4 |
| | **FISHER & PAYKEL** N369BN **(U)** | Fisher & Paykel | Australia | 1015/1196 | 1 year *(B)* | 254/108 | 160 x 64 x 68 | | ✓ | right/yes | 4/3 *(D)* | 4 |
| | **SAMSUNG** SR-348 | Samsung | Korea | 860/1004 | 1 year *(A)* | 215/83 | 168 x 65 x 64 | | | right/no | 3/2 | 0 |
| equal | **KELVINATOR** N400V | Email | Australia | 1095/1309 | 1 year *(B)* | 285/86 | 168 x 64 x 71 | | | right/no | 4/2 | 4 |
| | **KELVINATOR** N351V | Email | Australia | 965/1179 | 1 year *(B)* | 245/86 | 151 x 64 x 73 | | | right/no | 3/2 | 4 |
| | **NORGE** PT38F | Hoover | Australia | 995/1100 | 1 year *(B)* | 284/83 | 158 x 69 x 72 | | | right/yes | 4/2 | 2 |
| | **FRIGIDAIRE** FP383CDP | Email | Korea | 980/1199 | 1 year *(B)* | 202/75 *(C)* | 178 x 65 x 66 | | | right/no | 3/3 | 2 |

* Prices shown indicate the range found in nationwide checks in March 1993.
**U** Upside-down model — freezer below fridge compartment.
*(A)* Four additional years on compressor, parts only.
*(B)* Four additional years on sealed refrigeration system, parts only.
*(C)* Plus 55 L in Super Chill compartment.
*(D)* Two of the freezer 'shelves' are in fact removable baskets.
*(E)* New models have a chiller compartment in place of a meat keeper.
*(F)* With the Super Chill compartment acting as a chiller.

## 1 COMPARABLE MODELS

■ The **ADMIRAL IT38F** and **HOOVER B38TF** are technically identical to the **NORGE PT38F**, so the performance results apply to them as well, but check for different features if you're considering buying one.

## 2 SHELVES REMOVABLE WITH DOOR OPEN 90°/REVERSIBLE HINGES

Most of the models need their door to open wider than 90° to take shelves out; if you're planning to stand your fridge next to a wall you'll need to know this, and also to know which side the hinges are on and whether you can swap them to the other side to avoid the problem. Even if you can't swap the hinges yourself you may be able to order a model with hinges the other side — check when you buy.

## 3 NUMBER OF SHELVES

As well as shelves in the fridge and freezer compartments, all the fridges also have shelves in the fridge door, and most in the freezer door. Only the **FISHER & PAYKEL N369BN** and **N395BN** (both upside-down models) don't have shelves in the freezer compartment door, but their freezers are larger than all the other models', with two big baskets and a shelf.

## 4 ROLLERS

Rollers take the back-breaking out of moving a fridge; there seems no reasonable excuse for a model not to have at least two. Those with none usually have two fixed and two height-adjustable feet for levelling the fridge; models with two rollers also have two adjustable feet, and where there are four rollers two of them are adjustable.

## 5 SPECIAL-PURPOSE SHELF/COMPARTMENT

The idea of a chiller or meat keeper within the fridge section is to allow you to control the temperature at around 0°C — a bit colder than you might normally keep your fresh food compartment, but not as cold as the freezer. Some of the meat keepers have a separate temperature control, some not. They are useful for fish, shellfish, red meat and poultry, which last longer at these lower temperatures without freezing them.

A fast-freeze compartment in the freezer is designed to provide a storage area colder than the rest of the freezer, much like the chiller in the fridge compartment.

The Super Chill Zone in the **FRIGIDAIRE FP383CDP** is a separate compartment with its own door between the fridge and freezer compartments. Its temperature can be adjusted, so you can use it for rapidly cooling food, for keeping food at a temperature lower than in the fridge compartment, as extra fresh food space (perhaps for things like milk and soft drinks which are used frequently, so you don't keep letting warm air into the fridge area), or just as extra storage space with no cold air entering.

## 6 NOISE (dB)

Models range from 36 to 40 dB; this would be a barely noticeable

| 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
|---|---|---|---|---|---|---|---|
| Special-purpose shelf/compartment | Noise (dB) | Energy use (kWh/yr): claimed/measured | Energy efficiency: claimed/measured | Performance score (%) | Ease of use score (%) | Overall score (%) | Brand/model (in rank order) |
| Chiller | 40 | 740/720 | ★★★★/☆☆☆☆ | 58 | 75 | 63 | **SAMSUNG** SR-398 |
| | 38 | 1060/890 | ★★★/☆☆☆☆ | 58 | 73 | 62 | **FISHER & PAYKEL** N395BN **(U)** |
| | 36 | 930/860 | ★★★/☆☆☆☆ | 58 | 73 | 62 | **FISHER & PAYKEL** N375TN |
| | 36 | 1010/870 | ★★★/☆☆☆☆ | 56 | 73 | 61 | **FISHER & PAYKEL** N369BN **(U)** |
| Chiller, fast freeze | 40 | 672/690 | ★★★/☆☆☆☆ | 54 | 75 | 60 | **SAMSUNG** SR-348 |
| Meat keeper *(E)* | 38 | 920/940 | ★★★★/☆☆☆ | 51 | 75 | 58 | **KELVINATOR** N400V |
| Chiller | 36 | 920/950 | ★★★/☆☆☆ | 51 | 75 | 58 | **KELVINATOR** N351V |
| Meat keeper | 40 | 1050/950 | ★★★/☆☆☆ | 49 | 77 | 58 | **NORGE** PT38F |
| 'per Chill Zone', fast freeze | 37 | 940/810 *(F)* | ★★★/☆☆☆☆ *(F)* | 49 *(F)* | 77 | 57 | **FRIGIDAIRE** FP383CDP |

difference; the noise made by all of them is somewhere above a whisper (30 dB) but well below a voice at conversational level (around 60–70 dB).

## 7/8 ENERGY USE/ENERGY EFFICIENCY

This test is part of our performance score.

All but the two **KELVINATORs** and the **SAMSUNG SR-348** claimed to use *more* energy (kilowatt hours — kWh) per year than we measured (column 7). We also found all but the **KELVINATOR N400V** matched or exceeded the star rating claimed on their energy rating label (column 8). However, we'd still like to see more fridges with five or even six-star ratings; these days we'd expect better than a three-star rating.

For a rough idea of what it costs to run each fridge, you can divide the energy use (column 7) by 10 to give the annual running cost in dollars (assuming a price of 10 cents per kilowatt hour).

## 9 PERFORMANCE SCORE

As well as energy efficiency, the performance score includes results of two other tests.

■ The 'extra load pull-down test' measures how quickly the freezer will cool a load (made up of test packages with a similar temperature profile to meat) from 20°C to –15°C at an ambient room temperature of 20°C. This is intended to mimic normal shopping habits — people tend to add new foods to a compartment containing fully frozen foods. The range of times was quite wide, with the **FISHER & PAYKEL N375TN** coming in fastest at 9.9 hours and the **FRIGIDAIRE FP383CDP** slowest at 17.6 hours.

■ The 'warm-up' test measures what would happen if you had a power cut, demonstrating how long each fridge would keep the food at a safe temperature within its freezer compartment. We measured the time it took to warm up from –15°C to –5°C with the outside temperature at a warm 43°C. The results are an indication of how well insulated the models are.

A third test which is included on a pass/fail basis is to run the fridges in an outside temperature of 43°C to check they can handle a high ambient temperature satisfactorily. A fridge must maintain operating temperatures of no more than –15°C in the freezer and 0.5° to 6°C in the fridge compartment in order to pass this test. All the models passed.

## 10 EASE OF USE

The fridges were scored for ease of loading and unloading — storing awkward shapes, tall bottles and so on; ease of cleaning — for example, whether there were grooves which made it difficult to clean; and shelf adjustability. These scores were weighted evenly to give a final ease of use score. Their large size made all the fridges pretty easy to use.

## 11 OVERALL SCORE

Performance (which includes energy efficiency) and ease of use were weighted as follows to give the overall score:

■ Performance: 70%.

■ Ease of use: 30%.

# SHAMPOO VACUUM CLEANERS

*Don't be sucked in! Only one of the five cleaners performed OK as a carpet shampooer; all performed badly as ordinary vacuum cleaners.*

SHAMPOO VACUUM CLEANERS are also known as 3-in-1 machines: not only can they be used as shampooers and for dry vacuuming, they can also mop up spills and wash floors (and even unblock drains!). If they worked well and were easy to use they'd be pretty nifty machines, so we checked out all models on the market for up to about $500.

If you only shampoo your carpets occasionally it's cheaper to hire a machine, so we compared these models' shampooing performance with the BRITEX 'steam' cleaner, which you can hire from supermarkets.

**Testing for shampooing performance — most machines gave disappointing results.**

## AS DRY VACUUM CLEANERS

As ordinary vacuum cleaners all the models performed badly. The results for dry dirt pick-up ranged from 26% to 29% — a very poor result when compared with the Hoover Lark upright cleaner we used for comparison, which scored 55%. However, these scores are consistent with results we've found over the years for barrel and canister vacuum cleaners — uprights consistently outperform them.

## FOR WET USE

In this mode, on the other hand, all the machines performed well at sucking up spills. You can also wash hard floors with them, although with the VAX you have to buy an optional automop accessory for about $45.

## SHAMPOOING PERFORMANCE

These 3-in-1 machines look like ordinary canister vacuum cleaners but are larger and bulkier — which means you can't use them easily on stairs. As shampooers you use them in the same way as canister vacs, in that as you push and pull the wand over the floor the suction draws up the dirt from the carpet.

A trigger on the handle dispenses a low-foaming detergent solution onto the carpet in front of the head, which is transparent so you can see how much dirt is removed and whether you need to go over that patch again. The detergent is sucked up as the head passes over it, taking the dissolved soil with it. The dirty water is collected in a tank in the base of the cleaner and is tipped out when the tank is full.

Any wet shampoo process should achieve three things:

■ Obviously, it should clean your carpet. None of these cleaners did a particularly good job at removing the heavy soil which was trafficked into our carpet samples. According to the Australian Wool Testing Authority, which did this part of the testing for us, none of them was as effective as the truck-mounted units operated by some franchised commercial carpet cleaners, which (if translated into CHOICE scores) would be said to score around 80% for their ability to clean. By comparison, the best performers of the domestic models (the BRITEX hire machine and the VOLTA) scored only 60%; the others only managed 30% or 40%.

In their favour, none of the cleaners adversely affected the texture of the carpet pile.

■ The cleaner should be able to extract most of the solution it puts into the carpet, leaving it dry enough to walk on within hours.

Too much water left in the carpet can affect the backing so it shrinks or becomes distorted. It can even result in colour being drawn from the backing into the carpet. Furniture which is replaced onto wet carpet can leave marks or, if it has metal legs, rust stains.

There's also a convenience factor: it's much easier to restrict access to an area for three or four hours than 24 or more. There's no point spending valuable time cleaning your hallway carpet if you have to walk on it (thereby resoiling it) before it's properly dry.

The machines we tested varied greatly in the amount of water each left in the carpet, but all were touch-dry after 24 hours.

■ It should clean the carpet without leaving any shampoo residue.

The amount of detergent residue left after shampooing is important because it makes the carpet more susceptible to resoiling — the dirt clings to the pile and is not easily removed by daily vacuuming. The more detergent left in the carpet, the quicker it will resoil. Different machines recommend using different amounts of detergent.

None of the machines tested (including the BRITEX hire machine) removed detergent residue satisfactorily. We used

the detergent supplied with each cleaner, because our carpet samples were heavily soiled to highlight differences in performance, we used a double dose of shampoo, as some of the instructions recommended. This might mean more residue was left than under normal circumstances. You could use less shampoo, but that might mean less effective cleaning.

## User unfriendly

None of these cleaners could be said to be user-friendly as a shampooer. Conversion from ordinary dry use is fiddly, involving filter and head changes and lots of connecting tubes, water, shampoo and possibly defoamer. (The hired **BRITEX** — which is a shampooer only — is easier to set up.)

They were all laborious and slow to use, and every time the waste tank gets full you have to empty it — and the full tanks are fairly heavy to carry and manoeuvre. Then when you've finished you have to rinse and dry all the parts which have come into contact with the shampoo solution.

All this is made even more complicated if the instructions are a poor photocopy (**MODERN DAY**), incomplete (**AQUA VAC**) or in tiny print (**HOOVER**).

On top of all this, they're hard to store. You'll need a fairly wide cupboard — they're bulky, and come with hoses and wands which have to be stored separately. The accessory heads generally fit in the canister base, but there's nowhere to put the cord other than to wrap it round the top of the cleaner.

## What to buy

None of the cleaners we tested is a good performer for normal dry vacuuming, so unless you shampoo your carpets so often that hiring a machine is too expensive or inconvenient, we wouldn't recommend any of them.

If you really want a shampoo vacuum cleaner, the **VOLTA** is well ahead of the rest for shampooing performance and is compatively easy to use both dry and in shampoo mode.

The hired **BRITEX** performed as well at shampooing and almost as well at removing detergent residue, and was much easier to use. At around $42 for eight hours or an overnight hire, including shampoo and defoamer, it compares favourably with $200-$500 for the other cleaners if you don't shampoo your carpets very often. (Other brands can be hired, but the **BRITEX** is widely available.)

Given our findings, we've profiled only the **VOLTA** and the **BRITEX** in detail, leaving the scores in the table to speak for the other cleaners.

## Volta trio u78

*Price:* $399/$550

**Good points**

- The best shampooing performance of the machines we tested; equal to the hired **BRITEX** for cleaning and giving a slightly higher likelihood of the carpet staying clean.
- One of the best for ease of both shampooing and dry use.
- Carrying handle on shampoo tank.

**Bad points**

- Poor dust pick-up.
- Has many parts to clean after shampooing.
- Cleaning head difficult to push smoothly — it digs in at the edges.
- This machine hadn't been in use long before the sliding bleed valve broke off. We also noticed cracks in the base of two castor positions — one of which allowed water to leak after the castors were replaced. The manufacturer says the bleed valve has been replaced with a metal one and a five-wheeled tank introduced, which it claims will eliminate cracks in the base. Look for this new version.

## Britex steam cleaner

A larger version of the test cleaners, designed for carpet shampooing only and available for hire at supermarkets — other brands can be hired too, but it's widely available and we picked it as representative of the type. It uses hot water, not steam as implied by its name.

**Good points**

- Shampooing performance equal to the best of the machines tested (the **VOLTA**), and 'staying clean' potential nearly as good.
- Very easy to use — few parts to clean compared with the other machines (no filters to attach), and good instructions make setting up easy.
- $40–$60 for a day's or weekend's hire compares favourably with $200–$500 to buy the other cleaners if you don't shampoo your carpets very often.

**Bad points**

- Large and heavy — carrying it for any distance and loading it into the car can be difficult, and lifting out the water recovery tank to empty it requires some strength. A handle would make things easier.
- On a par with the loudest domestic cleaner tested (the **POWER VAC**) for noise.
- Defoamer required with shampoo.

# SHAMPOO VACUUM CLEANERS

| 1 | | | | | 2 ACCESSORY HEADS SUPPLIED | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brand/model (in rank order) | Manufacturer/ distributor | Origin | Warranty | Price ($)* | Crevice nozzle | Dusting brush | All-purpose nozzle (wet/dry) | Upholstery nozzle (shampoo) | Large hose kit | Squeegee for wet floors | Weight (kg)** | Max reach from |
| **VOLTA** Trio U76 | Volta | Italy | 2 years | 399/550 | ✓ | ✓ | ✓ | Optional | | ✓ | 9.8 | |
| **HOOVER** Aquamaster | Hoover | UK | 2 years | 349/399 | ✓ | ✓ | ✓ | | Optional | | 8.4 | |
| **MODERN DAY** 1000 | Godfreys Appliances | Australia | 1 years | 310/398 | ✓ | ✓ | ✓ | | Optional | ✓ | 7.0 | |
| **POWER VAC** 1200 | Shop-Vac | Australia | 2 years | 379/399 | ✓ | ✓ | ✓ | | ✓ | ✓ | 5.4 | |
| **VAX** 121 | Vax Appliances | Australia | 1 years | 365/399 | ✓ | ✓ | | ✓ | | | 9.2 | 1 |
| **AQUA VAC** 900A | Shop-Vac | Australia | 90 days | 129/199 | | | | | Optional | | 5.0 | |
| HIRE MACHINE | | | | | | | | | | | | |
| **BRITEX** Steam Cleaner | Britex | USA | na | 42–62 *(A)* | na | na | na | na | na | na | 21.6 | 1 |

* Prices shown indicate the range found in nationwide checks in February 1992.
** Dry weight including accessories.
**na** not applicable

*(A)* Approximately $42 for eight hours or an overnight hire; $52 for 24 hours or a 'short weekend' (3 pm Saturday to 9 am Monday); $62 for 48 hours, including shampoo, defoamer and insurance.

## HOOVER AQUAMASTER

Poor performance, but reasonably easy to use.

## POWER VAC 1200

One of the three worst for shampooing performance.

## AQUA VAC 900A

The cheapest machine by far, but very basic, coming with no accessories. The lowest-ranking one too — including the lowest score for ease of use both for shampooing and dry use, and one of the three worst for shampooing performance.

## MODERN DAY 1000

The same base and dry vacuuming accessories as the **POWER VAC** but with a more powerful motor; it scored slightly better for shampooing.

## VAX 121

One of the three worst for shampooing performance.

| | 4 | 5 | 6 | 7 | 8 | 9 | |
|---|---|---|---|---|---|---|---|
| | DRY USE SCORES | | SHAMPOOING SCORES | | | | |
| | Dirt pick-up (%) | Ease of use (%) | Cleaning (%) | Staying clean (%) | Ease of use (%) | Overall score (%) | Brand/model (in rank order) |
| 1 | 27 | 70 | 60 | 50 | 55 | 50 | **VOLTA** Trio U76 |
| 2 | 27 | 70 | 40 | 40 | 54 | 45 | **HOOVER** Aquamaster |
| 3 | 26 | 67 | 40 | 60 | 44 | 44 | **MODERN DAY** 1000 |
| 3 | 26 | 67 | 30 | 50 | 44 | 41 | **POWER VAC** 1200 |
| 3 | 27 | 65 | 30 | 30 | 52 | 40 | **VAX** 121 |
| 4 | 29 | 52 | 30 | 50 | 43 | 39 | **AQUA VAC** 900A |
| 3 | not applicable | not applicable | 60 | 40 | 71 | not applicable | **BRITEX** Steam Cleaner |

## 1 SIMILAR MODELS

The **POWER VAC** and **AQUA VAC** have the same motor and canister. However, the castors, head and wand on the **POWER VAC** are of better quality, it has a longer warranty, and the **AQUA VAC** doesn't come with any accessories, which may account for the $200 price difference. The **MODERN DAY,** also made by Shop-Vac but distributed by Godfreys, has the same base and dry vacuuming accessories as the **POWER VAC,** but has a more powerful motor.

## 2 ACCESSORY HEADS SUPPLIED

Accessories for cleaning areas other than floors are so useful we think all machines should be supplied with at least a crevice nozzle and a dusting brush. The only model not to supply either was the **AQUA VAC** — they must be purchased as an optional extra.

Only the **POWER VAC** also includes a large hose kit, which has a larger than normal diameter hose, wand and nozzle. This is useful for picking up wet leaves, perhaps wood shavings from the workshop, and household debris. For some others it is available as an optional extra.

## 3 NOISE

Noise levels were measured at approximately head height in the user's position when vacuuming a carpet. Even the quietest of them (the **HOOVER**) is noisier than the quietest dry vacuum cleaners.

## 4 DIRT PICK-UP

Dry vacuuming was tested on 80%/20% wool/nylon carpet. 100 grams of specially made dirt is rubbed into a section of carpet, which is then vacuumed eight times at a set speed. The weight of the recovered dirt is measured and reported as a percentage. This is done three times for each cleaner, and the results are averaged. All the cleaners were fairly poor at picking up dry dirt. This score was weighted the highest (30%) in the overall score because dry vacuuming is likely to be the most common use for these cleaners.

## 5 DRY EASE OF USE

The cleaners were rated for ease of assembly and disassembly, ease of using controls, power cord storage, cleaning under low furniture, ease of storage, mobility and emptying the dustbag. None of these machines has provision for cord storage other than wrapped round the top of the cleaner, and none can be used easily on stairs because their bulk means they can't stand safely on the width of a normal step. None of the hoses or wands can be stored on the cleaner.

## 6 SHAMPOO CLEANING PERFORMANCE

Carpet was dirtied to a level typical of a heavily trafficked area — the kind of situation where an effective carpet shampooing system would be most useful. After shampooing, the amount of dirt removed was rated on a 10-point scale, which we've converted to percentage scores. Ten per cent difference in score therefore indicates a noticeable difference in dirt removal. Only the **VOLTA** and the hired **BRITEX** achieved a score which could be described as 'good'; none achieved the standard you'd expect from a professional carpet cleaner.

## 7 STAYING CLEAN

Carpet shampoo detergents can leave a residue on the carpet fibres if they're not adequately removed by the cleaner. This means dirt sticks to the fibres more readily, leading to faster resoiling. We applied a second lot of dirt to the cleaned carpet samples and scored them on the basis of how clean they came up after dry vacuuming — a high score means the carpet stayed cleaner after being shampooed by this model than by one with a lower score. Only the **MODERN DAY** achieved a score that could be called 'good' for this test.

## 8 SHAMPOOING EASE OF USE

As discussed in the article (*User unfriendly* on page 43), all the cleaners except the hired **BRITEX** are fiddly and time-consuming to assemble for shampooing, laborious and slow to use, and difficult and sometimes back-breaking to empty, disassemble and clean after use. The hired **BRITEX** is much easier both to prepare for use and to use, its main disadvantage being its overall weight and bulk and the weight of its full tank when you need to empty it. It also needs no conversion, being specifically designed for shampooing.

## 9 OVERALL SCORE

The previous five aspects were weighted as follows to produce the overall score:

- Dry dirt pick-up: 30%.
- Dry vacuuming ease of use: 20%.
- Shampoo cleaning performance: 20%.
- Staying clean: 10%.
- Shampooing ease of use: 20%.

## FOR PEOPLE WITH DISABILITIES

All these cleaners are bulky, heavy and difficult to set up and take apart, and would be time-consuming and tiring to use. They'd all be a problem even if someone else assembled and disassembled them for you. You'd be better to hire a professional to clean the carpets instead.

# LETTERS

Send your letters to **CHOICE, 57 Carrington Road, Marrickville 2204**. Where possible, please include your daytime telephone number, as we may wish to contact you direct for more information or to discuss your comments and queries.

## LIFE AFTER DEATH

I refer to the article *Matters of life and death* (CHOICE, September 1992), in particular the section dealing with donating organs.

The author is only partially correct in stating that "...donation of organs is restricted in practical terms to where someone dies in hospital on a life-support system in an intensive care unit". Unfortunately, the author has taken into account only the donation of solid vascularised organs such as kidney, heart and liver, and has failed to mention the donation of invaluable tissues such as cornea, heart valves, skin and bone.

The donation of these tissues can take place many hours after death. For instance, although the eye banks in different states have slightly differing protocols, corneas are generally viable for transplantation up to at least 12 hours after death. The retrieval operation is usually performed at a hospital but can also be undertaken on the premises of the funeral director. Almost all eyes are acceptable for donation regardless of age, cancer or the wearing of spectacles. Approximately 1000 corneal grafts are now performed annually in Australia with a success rate greater than 90%. However, over 1000 patients Australia-wide are still waiting for this sight recovery.

**Dr G Pollock**
**Deputy Director**
**Lions Eye Bank**
**Melbourne, Vic**

## ARTHRITIS: DIET CAN HELP

May I draw your attention to a significant omission in the article *Living with arthritis* (CHOICE, October 1992). Under the heading, 'What about diet?' you stated rheumatoid arthritis did not seem to be affected by diet, and gout was the only type of arthritis that could be treated with dietary intervention. The Arthritis Foundation of Australia also takes this view.

Recently the British medical journal, *The Lancet*, published a Norwegian report called 'Controlled Trial of Fasting and 1-year Vegetarian Diet in Rheumatoid Arthritis'. In this project 27 patients spent four weeks at a health centre, where their diet for the first seven to 10 days included herbal teas, garlic, vegetable broth, decoction of potatoes and parsley, and juice extracts from carrots, beets and celery.

Patients were then put on individually adjusted diets, totally avoiding gluten, meat, fish, eggs, dairy products, refined sugar, citrus fruits, salt, strong spices, preservatives, alcohol, tea and coffee.

After four weeks there was a significant improvement in tender and swollen joints, joint movement, level of pain, grip strength and white blood cell count. The benefits were still present after one year.

As former resident manager of an Australian live-in health centre for seven years, I witnessed many hundreds of people under supervision use an approach almost identical to that reported in *The Lancet*. The vast majority were absolutely thrilled with their improvement in terms of decrease in symptoms.

I have no doubt whatsoever that diet is a major factor in decreasing the symptoms of rheumatoid arthritis.

**R French**
**Natural Health Society of Australia**
**Penrith, NSW**

*The conclusion of the study in question was that "this dietary regimen seems to be a useful supplement to conventional medical treatment of rheumatoid arthritis". Any sufferers of the disease might like to discuss following such a diet with their medical practitioner, but it's by no means established as a 'cure' in its own right.*

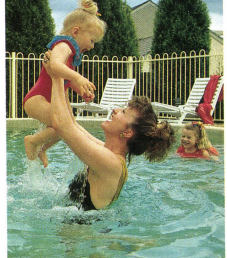
## THANKS FOR THE RECALL

Having just read the January 1993 issue of CHOICE after moving into a brand-new gas-serviced unit, your *Recalls and bans* list struck a chord.

On checking, I found the gas hot water system fitted to the unit fell within the list of recalled products. I immediately passed this information on to the leasing agent for follow-up.

Had it not been for CHOICE, no one may have been any the wiser till the fire brigade was called out. Keep up the good work.

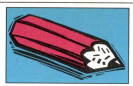
**Ian Fletcher**
**Cranbourne, Vic.**



## THUMBS UP FOR POOL FENCING

At last someone in the media has given a full, detailed, reasoned and unbiased appraisal of the pros and cons of swimming pool isolation fencing (CHOICE, December 1992). CHOICE is to be congratulated on its efforts in this vital area for all Australians. No doubt the small but vocal anti-fencing lobby will howl loud and hard about statistics, studies and supervision, mouthing its usual dubious assertions. What has to be borne in mind, apart from the overwhelming evidence for the need for isolation fencing, is the fact that no statistical study will tell society how many lives have been *saved* by such fences. Such figures simply are not and cannot be collected. However, plain simple logic must tell us that a child's life is more likely to be saved by the presence of a properly maintained isolation fence than by its absence.

**S Morgan**
**North Sydney, NSW**



## WHAT DO YOU KNOW?

**1** What information can't be put on your credit reference file?
A) Criminal or police record information.
B) A credit provider's opinion that you have committed a serious credit infringement.
C) Known aliases.

**2** How long can credit agencies keep personal information?
A) Generally speaking, five years.
B) Two months, unless you've committed a serious credit infringement.
C) Generally speaking, seven years, unless a bankruptcy order has been made against you, in which case it's up to the credit providers to decide.

**3** You must pay a fee to get a copy of your credit reference file.
True or false?

**4** A repairer undertakes to attend your premises at a particular time and fails to turn up. You have the right to sue for any loss you suffer as a result.
True or false?

**5** You have a legal right to see your medical files.
True or false?

**6** You have a legal right to see your hospital records?
True or false?

**7** The law no longer permits relatives to keep the body of a family member at home until the day of the funeral.
True or false?

**8** If you receive goods in the mail you didn't order, they automatically become your property after three months.
True or false?

## ANSWERS

**1. A.** In accordance with the principles of the Privacy Act, the Credit Reference Association can only keep information which is relevant to credit provision. Among other things, criminal or police record information, details of political, social or religious beliefs and lifestyle and ethnic information are not permitted to be kept on record.

**2. A.** Generally speaking, five years. Information about bankruptcy orders and serious credit infringements is allowed to be kept for seven years.

**3. False.** The credit agency is no longer allowed to charge a fee for providing you with your file unless you have requested a copy within the last six months, or no changes have been made to your file since the last time you received a copy.

**4. True** — but while you have the right to sue for any *loss* you suffered, you can't sue for mere inconvenience. You could, for instance, sue for the loss of wages if you had made it clear to the repairer you were taking time off to be there. The catch is, though, that repairers normally refuse to name a time they will arrive, and without any specific arrangement you have no redress.

**5. False.** You don't have a legal right to see your medical files — they are the doctor's property. Some doctors might agree to making your files available to you. If you change doctors you can ask for your files or notes to be supplied to your new doctor.

**6. False.** You don't have an automatic right to see your hospital records. However, many hospitals now have a policy of making records available, and in some states public hospitals are bound to comply with Freedom of Information legislation which gives people the right to access personal records.

**7. False.** There is no law requiring bodies to be stored in a mortuary and, if you wish, the body may be kept at home until the day of the funeral — you might need to discuss embalming with the funeral director.

**8. True** — for most goods commonly supplied by mail order. If the seller has not claimed them in three months (you must not prevent the seller from collecting them) they become your property. If you have written to the seller saying you did not order the goods and they are available to be collected you can keep them after only one month if the seller does not call and collect them.

## RECALLS AND BANS

**If you find a recall or ban not on our list please let us know.**

**Austrimi** has recalled AUSTRIMI SEAFOOD HIGHLIGHTER 1 kg PACKS and PACIFIC KING OCEAN FLAKES, OCEAN SUPREME SEAFOOD HIGHLIGHTER, FRIONOR SEAFOOD SALAD MIX and PACIFIC PEARL SEAFOOD FLAKES as they may contain Listeria bacteria. Do not eat. Return to place of purchase for refund. For further information call Neville Austen on 008 655 553.

**Soy Products** has recalled the laxative ROBERTS CLEANSING HERBS 100 g (batch no. 10, use-by date 16/11/93) due to microbiological contamination. Do not eat. Return to retailer for refund.

**Consolidated Biscuits** has recalled NATURES ENERGISER HANDI SNACKS AND CHEESE 150 g, HI FIBRE RYVITA AND CHEESE SPREAD 140 g and HANDI SNACKS AND CHEESE SPREAD 140 g (use-by date before 1/6/93) as mould has been found in the cheese component. The products were sold in NSW, Queensland and Victoria. Do not eat. Return to retailer for refund.

**International Trucks** and **Williams Controls** have recalled all ATKINSON, S-LINE and TRANSTAR VEHICLES WITH DETROIT DDEC, CATERPILLAR PEEC or CUMMINS CELECT ELECTRONIC CONTROLLED ENGINES (chassis range S00856 to Y10213) as the return torsion springs on the pedals have the potential to break. Contact your ITAL branch or dealer to arrange inspection and pedal replacement if necessary.

# TWELVE MONTH INDEX

## JUNE 1992 — MAY 1993

**(T) test**
**(D) includes assessment of suitability for those with disabilities**
**(F) feature — general advice**
**(M) feature — includes market information**
**(S) subscriber survey or user trial**
**(C) Consumer in law**
**(L) letter**
**(U) update of previous report**
*** additions or corrections to reports**


Abattoirs Jun(F),Sep(L)
Air conditioners, reverse-cycle Nov(T,D)
Air quality, indoor Jan(F)
Allergies Nov(F)
Answering machines Oct(T)
Arthritis Oct(F),May(L)
Asthma management May(F)
Audio equipment
  car radio/cassette players Jun(T)
  CD players, multi-disc Mar(T)
Australian-made labelling Jan(F)
Bank accounts Sep(M),Nov*
Barbecues, kettle Jan(T)
Beer, reduced-alcohol Apr(T)
Bicycle helmets Oct(T)
Blenders, handheld Nov(T,D)
Breast cancer Jan(F)
Buying guide, annual Dec
Cameras, compact Feb(T)
Carpets
  spot cleaners for Sep(T)
  stain-resistance treatments Nov(T)
Cars
  child restraints Apr(M)
  clamping and tow-away insurance Feb(C) Dec(S)
  radio/cassette players Jun(T)
  reliability survey Aug(S)
CD players, multi-disc Mar(T)
Cellular phones Jul(T,D),Oct(L)
Chemicals in the home Sep(F)
Child car restraints Apr(M)
Cholesterol and oat bran Jun(F)
Clothes labelling Apr(C)
Coffee bags Oct(S)
Complaints against lawyers Jun(C)
Computer printers Mar(T)
Computers, notebook Dec(T)
Cordless phones Dec(T,D)
Cosmetics, animal testing Mar(M)
Credit cards Feb(F)
Desserts, frozen Dec(T)
Detergents, laundry Mar(T)
Dishwashers Feb(T,D)
Drained weight of canned food Aug(T)
Economic jargon explained Oct(F)
Electric frypans Aug(T)
Environment quiz May(F)
Food
  canned, drained weight Aug(T)
  cholesterol and oat bran Jun(F)
  coffee bags Oct(S)
  frozen desserts Dec(T)
  fruit substitutes for kids Mar(T)
  irradiation of Aug(F)
  packaged meals for kids Feb(M)
  yoghurt Nov(T)
Frypans, electric Aug(T,F)
Funerals, organising Sep(F)
Gas heater, Mod-n-Aire Jul(F)
Gas heaters, flued Apr(T,D)
'Generic' and national brands Aug(F)
Goods and services tax Jul(F),Oct(L)
Greenhouse effect Oct(F)
Hair and hair products Jan(F)
Handheld blenders Nov(T,D)
Health insurance Nov(M)
Heaters, gas flued Apr(T,D)
Heating, home May(F)
Helmets, bicycle Oct(T)
Home, chemicals in the Sep(F)
Home heating May(F)
Index, three-year Jun
In-line skates Dec(T)
Indoor air quality Jan(F),Mar*
Insulation Apr(F)
Insurance
  car Dec(S)
  health Nov(M)
Irradiation of food Aug(F)
Jargon, economic Oct(F)
Labelling, Australian-made Jan(F)
Labelling, clothes Apr(C)
Lawyers, complaints against Jun(C)
Legal advice, by phone Nov(C)
Lost wallet, what to do Aug(C),Nov*
Laundry detergents Mar(T)
Meat production Jun(F),Sep(L)
Microwave ovens, small Jun(T,D),Aug*
Mod-n-Aire gas heater Jul(F)
National and 'generic' brands Aug(F)
Network selling Jul(F)
Notebook computers Dec(T)
Oat bran Jun(F)
Orbital sanders Jun(T)
Ozone layer Aug(F)
Packaging, 'green' Jun(F)
Pay TV Oct(F),Feb(L)
Perfume May(T)
Phone advice, legal Nov(C)
Phones
  cellular Jul(T,D),Oct(L)
  cordless Dec(T,D)
Pool fences Dec(F),May(L)
Product recalls and bans May(C)
Reclaiming stolen property Sep(C)
Recycling Apr(F)
Reduced-alcohol beer Apr(T)
Refrigerators
  300–349 litre Sep(T,D)
  350-400 litre May (T)
Reliability survey, cars Aug(S)
Reverse-cycle air conditioners Nov(T,D)
Safety switches Jul(F)
Sanders, orbital Jun(T)
Savings plans Mar(F)
Secateurs Oct(S),Feb(L)
Sewing machines Apr(T,D)
Shade materials Jan(F)
Shampoo vacuum cleaners May(T,D)
Skates, in-line Dec(T)
Spot carpet cleaners Sep(T)
Standards Australia Dec(F),Feb(L)
Stolen property, reclaiming Sep(C)
Sun protection Jan(F)
Superannuation guarantee Feb(F)
Supermarket survey Jul(S)
Tax, goods and services Jul(F),Oct(L)
Tax, rights and obligations Mar(C)
Telecommunications Feb(M)
TV, pay Oct(F),Feb(L)
Televisions
  medium-sized Jul(T,D)
  pocket-sized May(T)
  portable Apr(T,D)
Unit pricing Sep(F)
Vacuum cleaners, shampoo May(T,D)
Vets' fees Nov(F),Jan(L),Feb(L)
Video recorders Mar(T)
Wallet, if you lose Aug(C),Nov*
Washing machines Jan(T,D),Mar*
Water filters Feb(T)
Yoghurt Nov(T,F)


## PLEASE SEND US

■ change of address ■ renewal
■ subscription inquiries
Just write to:
**The Subscription Section**
**Australian Consumers' Association**
**57 Carrington Road, Marrickville 2204.**
or phone **(02) 558 8088**


ISSN 0009 496X Registered by Australia Post — publication No NBQ 0301
Wholly printed in Australia by Wilke Color, 37–49 Browns Road, Clayton 3168 in 1993 for the publisher, Australian Consumers' Association, 57 Carrington Road, Marrickville 2204.